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(54) Title: A NOVEL NUCLEIC ACID MOLECULE

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(57) Abstract

The present invention is directed generally to an isolated nucleic acid molecule encompassing a neocentromere or a functional derivative thereof or a latent, synthetic or hybrid form therof and its use *inter alia* in developing a range of eukaryotic artificial chromosomes including mammalian (e.g. human) and non-mammalian artificial chromosomes. Such artificial chromosomes are useful in a range of genetic therapies.

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A NOVEL NUCLEIC ACID MOLECULE

FIELD OF THE INVENTION

5 The present invention is directed generally to an isolated nucleic acid molecule encompassing a neocentromere or a functional derivative thereof or a latent, synthetic or hybrid form thereof and its use *inter alia* in developing a range of eukaryotic artificial chromosomes including mammalian (e.g. human) and non-mammalian artificial chromosomes. Such artificial chromosomes are useful in a range of genetic therapies.

10

BACKGROUND OF THE INVENTION

Bibliographic details of the publications referred to by author in this specification are collected at the end of the description.

15

The rapidly increasing sophistication of recombinant DNA technology is greatly facilitating research and development in the medical and allied health fields. A particularly important area is in mammalian including human genetics and the molecular mechanisms behind some genetic abnormalities. Progress in research in this area has been hampered by the lack of a cloned nucleic acid molecule encompassing a human centromere. The identification and cloning of a human centromere will promote the development of techniques for introducing genes into eukaryotic cells and in particular mammalian including human cells and will be an important asset to gene therapy and the development of a range of genetic diagnostic tests.

25 The centromere is an essential structure for sister chromatid cohesion and proper chromosomal segregation during mitotic and meiotic cell divisions. The centromere of the budding yeast Saccharomyces cerevisiae has been extensively studied and shown to be contained within a relatively short DNA segment of 125 bp that is organized into an 8-bp (CDEI) and 26-bp (CDEII) domain, separated by a 78- to 87-bp, highly AT-rich, middle (CDEII) domain (Clarke and Carbon, 1985). The centromere of the fission yeast Schizosaccharomyces pombe is considerably larger, ranging from 40 to 100 kb, and consists of a central core DNA element of 4 to 7 kb flanked on both sides by inverted repeat units (Steiner et al., 1993). Recently, the

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functional DNA components of a higher eukaryotic centromere have been characterized in a minichromosome from *Drosophila melanogaster* and shown to consist of a 220-kb essential core DNA flanked by 200 kb of highly repeated sequences on one side (Murphy and Karpen, 1995).

5 The mammalian centromere, like the centromeres of all higher eukaryotes studied to date. contains a great abundance of highly repetitive, heterochromatic DNA. For example, a typical human centromere contains 2 to 4 Mb of the 171-bp α-satellite repeat (Wevrick and Willard 1989, 1991; Trowell et al., 1993), plus a smaller and more variable quantity of a 5-bp satellite III DNA (Grady et al., 1992; Trowell et al., 1993). The role of these satellite sequences is 10 presently unclear. Transfection of a cloned 17-kb uninterrupted α-satellite array into cultured simian cells (Haaf et al., 1992) or a 120-kb α-satellite-containing YAC into human and hamster cells (Larin et al., 1994) appear to confer centromere function at the sites of integration. Other workers have analyzed rearranged Y chromosomes (Tyler-Smith et al., 1993), or dissected the centromere of the human Y chromosome with cloned telomeric DNA (Brown et al., 1994) and 15 suggested that 150 to 200 kb of α-satellite DNA plus ~300 kb of adjacent sequences are associated with human centromere function. In addition, a human X-derived minichromosome that retained 2.5 Mb of α-satellite array has been produced by telomere-associated chromosome fragmentation (Farr et al., 1995). In all these studies, it is not known whether non- α -satellite DNA sequences are embedded within the centromeric site and operate independently of, or in 20 concert with, the α -satellite DNA.

In mammals, four constitutive centromere-binding proteins, CENP-A, CENP-B, CENP-C, and CENP-D, have been characterized to varying extents and implicated to have possible direct roles in centromere function. CENP-A, a protein localized to the outer kinetochore domain, is a centromere-specific core histone that shows sequence homology to the histone H3 protein and may serve to differentiate the centromere from the rest of the chromosome at the most fundamental level of chromatin structure - the nucleosome (Sullivan *et al.*, 1994). CENP-B, a protein which associates with the centromeric heterochromatin through its binding to the CENP-B box motif found in primate α-satellite and mouse minor satellite DNA, probably has a role in packaging centromeric heterochromatic DNA - a role which, however, may not be indispensable since the protein is undetectable on the Y chromosome (Pluta *et al.*, 1990) and is found on the

inactive centromeres of dicentric chromosomes (Earnshaw et al., 1989). CENP-C has been shown to be located at the inner kinetochore plate and is postulated to have an essential although yet undetermined centromere function, as seen, for example, from inhibition of mitotic progression following microinjection of anti-CENP-C antibodies into cells (Bernat et al., 1990; 5 Tomkiel et al., 1994) and from its association with the active but not the inactive centromeres of dicentric chromosomes (Earnshaw et al., 1989; Page et al., 1995; Sullivan and Schwartz, 1995). Finally, CENP-D (or RCC1) is a guanine exchange factor that appears to have a general cellular role that is neither specific nor clear for the centromere (Kingwell and Rattner 1987; Bischoff et al., 1990; Dasso, 1993). More recently, a new role for the mammalian centromere 10 as a "marshalling station" for a host of "passenger proteins" (such as INCENPs, MCAK, CENP-E, CENP-F, 3F3/2 antigens, and cytoplasmic dynein), has been recognized (reviewed by Earnshaw and Mackay, 1994, and Pluta et al., 1995). These passenger proteins, whose appearance at the centromere is transient and tightly regulated by the cell cycle, provide vital functions that include motor movement of chromosomes, modulation of spindle dynamics, 15 nuclear organization, intercellular bridge structure and function, sister chromatid cohesion and release, and cytokinesis. At present, except for CENP-B, none of the constitutive or passenger proteins have been demonstrated to bind mammalian centromere DNA directly.

In work leading up to the present invention, the inventors identified in a patient (hereinafter referred to as "BE") an unusual human marker chromosome, mardel 10, which is 100% stable in mitotic division both in patient BE and in established fibroblast and transformed lymphoblast cultures. In accordance with the present invention, a region of the mardel (10) chromosome has been cloned together with the corresponding region from a normal human subject. The nucleic acid molecules cloned contain no substantial α-satellite repeats yet are mitotically stable. The nucleic acid molecules encompass therefore, a new form of centromere referred to herein as a "neocentromere". The identification and cloning of a eukaryotic neocentromere without substantial α-satellite DNA repeat sequences now provides the means of generating a range of eukaryotic artificial chromosomes such as mammalian including human artificial chromosomes with uses in genetic therapy, transgenic plant and animal production and recombinant protein production. A range of diagnostic reagents is now also obtainable using the cloned neocentromere.

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SUMMARY OF THE INVENTION

Sequence Identity Numbers (SEQ ID NOs.) for the nucleotide sequences referred to in the specification are defined following the bibliography.

5

Throughout this specification and the claims which follow, unless the context requires otherwise, the word "comprise", or variations such as "comprises" or "comprising", will be understood to imply the inclusion of a stated integer or group of integers but not the exclusion of any other integer or group of integers.

10

A fibroblast cell line 920158 carrying the mardel marker chromosome was deposited at the European Collection of Cell Cultures (ECACC), Centre for Applied Microbiology Research, Salisbury, Wiltshire, SP4 0JG, UK on 1 May, 1997 under Accession No. 97051716. Bacterial artificial chromosomes (BACs) carrying portions of the mardel (10) chromosome have also been 15 deposited at ECACC as follows:

BAC/E8-1: deposited on 5 May 1998 under Accession Number 980505016;

BAC/F2-14: deposited on 5 May 1998 under Accession Number 980505017.

20 A number of human fibrosarcoma cell lines carrying various neocentromeric constructs were deposited at ECACC as described hereafter by Accession Number with the date of deposit in parenthesises.

	HT-38	98050704 (7 May 1998)
25	HT-47	98050705 (7 May 1998)
	HT-54	98050706 (7 May 1998)
	HT-190	98050707 (7 May 1998)
	HT-191	98050708 (7 May 1998).

30 One aspect of the present invention provides an isolated nucleic acid molecule comprising a sequence of nucleotides derived from a eukaryotic chromosome and encompassing a

neocentromere or a functional derivative synthetic or hybrid form thereof which nucleic acid molecule or its derivatives, synthetic forms or hybrid forms when introduced into a compatible cell is capable of replicating, acting as an extra-chromosomal element and segregating with cell division.

5

Another aspect of the present invention contemplates a nucleic acid molecule or its chemical equivalent having a tertiary structure which defines a human neocentromere or a functional derivative thereof or a latent, synthetic or hybrid form thereof or its mammalian or non-mammalian homologue.

10

Yet a further aspect of the present invention is directed to an isolated nucleic acid molecule comprising a sequence of nucleotides encompassing a neocentromere derived from a eukaryotic chromosome, which nucleic acid molecule when introduced into a compatible cell is a replicating, extra-chromosomal element which segregates with cell division.

15

Still another aspect of the present invention is directed to an isolated nucleic acid molecule having a sequence of nucleotides or their chemical equivalents which directs a conformation defining a human neocentromere or a functional derivative thereof or a latent, synthetic or hybrid form thereof or a mammalian or non-mammalian homologue thereof wherein the neocentromere associates with centromere binding proteins (CENP) -A and CENP-C or antibodies thereto and does not contain substantial α-satellite DNA repeat sequences.

A further aspect of the present invention is directed to an isolated nucleic acid molecule comprising a nucleotide sequence encompassing a neocentromere or a functional derivative, synthetic or hybrid form thereof which when said nucleic acid molecule is in linear form and co-introduced into a cell together with a telomeric sequence, is capable of replicating, remaining as an extra-chromosomal element and segregates with cell division.

Another aspect of the present invention provides an isolated nucleic acid molecule or a 30 derivative, synthetic or hybrid form thereof comprising a sequence of nucleotides:

(i) which directs conformation defining a human neocentromere or a functional derivative

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thereof or a latent, synthetic or hybrid form thereof or its mammalian or non-mammalian homologue wherein said neocentromere is capable of associating with CENP-A and CENP-C;

- (ii) which contains no substantial α-satellite DNA sequence repeat; and
- 5 (iii) which is capable, when introduced into compatible cells, of replication, remaining extrachromosomal and segregating with cell division.

Even yet another aspect of the present invention is directed to a genetic construct comprising an origin of replication for a eukaryotic cell and a nucleic acid molecule encompassing a human neocentromere or a functional derivative thereof or a latent, synthetic or hybrid form thereof or its mammalian or non-mammalian homologue flanked by telomeric nucleotide sequences functional in the cell in which the genetic construct is to replicate and wherein said genetic construct when introduced into a cell is a replicating, extra-chromosomal element which segregates with cell division.

15

Another aspect of the present invention is directed to a genetic construct in the form of a eukaryotic artificial chromosome such as a mammalian artificial chromosome (MAC), a human artificial chromosome (HAC) or comprising an origin of replication and a sequence of nucleotides which:

- 20 (i) directs a conformation defining a human neocentromere or a functional derivative thereof or a latent, synthetic or hybrid form thereof wherein said neocentromere is capable of associating with CENP-A and CENP-C or antibodies thereto; and
 - (ii) contains no substantial α-satellite DNA repeat sequences;
- said sequence of nucleotides flanked by eukaryotic (e.g. mammalian) telomeric sequences which
 are in turn flanked by yeast telomeric sequences wherein a unique enzyme site is located between
 the human and yeast telomeric nucleotide sequences such that upon contact with said enzyme,
 the yeast telomeric sequences are removed and the eukaryotic (e.g. mammalian) telomeric
 sequences are exposed.
- 30 Still another aspect of the present invention provides a genetic construct comprising an origin of replication and a first nucleic acid molecule defining a human neocentromere or a functional

derivative thereof or latent, synthetic or hybrid form thereof, a second nucleic acid molecule encoding a peptide, polypeptide or protein, wherein said first and second nucleic acid molecules are flanked by a first set of eukaryotic (e.g. mammalian, such as human) telomeric sequences which are in turn flanked by a second set of eukaryotic (e.g. yeast) telomeric sequences wherein there are unique enzyme sites between the first and second telomeric sequences such that upon contact with a required enzyme, the second telomeric sequences are cleaved off to expose the first telomeric sequences.

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BRIEF DESCRIPTION OF THE FIGURES

10

Figure 1 is a schematic representation showing identification of a YAC contig spanning the marker centromere region. (A) Comparison of GTL banding patterns of mardel 10 and normal chromosome 10. The pair of open arrows indicate the two breakpoints on a normal chromosome 10 in generating the marker chromosome (Voullaire et al., 1993). The long and short arms of the marker chromosome are designated q' and p', respectively, to distinguish them from the q and p arms of the normal chromosome 10. Asterisk denotes the position of a cosmid 10pC38 that was used to "tag" the q'-arm of stretched marker chromosomes in the ANTI-CEN/FISH experiments. (B) A 4-megabase YAC contig (#082) from 10q25.2 region that spans the marker centromere. The tilling path of YACs #0 to #23 and their corresponding CEPH library addresses are shown. (C) FISH mapping of selected YAC clones from contig #082 using normal fluorescence microscopy and standard metaphase chromosomes prepared from transformed lymphoblast cells of patient BE. The distribution of FISH signals (vertical axis) is shown as a percentage of the signals on one arm of the marker chromosome that is in excess of those found on the opposite arm of the chromosome. The total number of fluorescence signals scored for each of the YAC clones is indicated in brackets.

Figure 2 is a photographic representation showing ANTI-CEN/FISH analysis of the marker centromere. (A) Detection of α-satellite DNA using a mixture of α-satellite DNA probes (red signals) under low stringency conditions. Centromeres were counter-labelled with CREST#6 autoimmune antibody (pale blue dots; or white when superimposed on a red background). Chromosomes were prepared from transformed lymphoblast cells of patient BE. The right-hand

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panel represents green pseudo-coloring of DAPI images of chromosomes to provide a better definition of chromosome outline. Only the signal for the antibody, but not that for α -satellite, was seen on the marker centromere (arrowed). (B) Simultaneous labelling of stretched human metaphase chromosomes with CREST#6 (red) and anti-CENP-C antibody, Am-C1 (pale blue), 5 with the white color indicating full coincidence of the two antibody signals. (C) Detection of CENP-C on the marker chromosome. Simultaneous labelling of the marker chromosome (arrowhead) with (a) Am-C1 (pale blue) and (b) CREST#6 (red). (c) Combined images of a and b, showing complete coincidence of Am-C1 and CREST#6 signals. (d) FISH analysis of the same cell as a-c using the 10pC38 cosmid probe (pale blue dots and green arrows) to identify the 10 marker chromosome. Some loss of ANTI-CEN signal, especially for the Am-C1 antibody was seen following FISH. (e) Green pseudo-coloring of DAPI images. A colour photograph corresponding to this figure is available upon request.

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Figure 3 is a photographic representation showing ANTI-CEN/FISH analysis of cosmid clones 15 on stretched (A, a-f) and superstretched (B) metaphase chromosomes. (a-c) Examples of cosmid signals (white arrows) localized to the q'-region of the marker centromere. (d-f) Examples of cosmid signals (white arrows) localized to the p'-region of the marker centromere. Green arrows indicate positions of the 10pC38 cosmid DNA tag used to mark the q'-end of the marker chromosome. (B) Mapping of Y6C21 onto a superstretched metaphase chromosome. Not 20 included is the 10pC38 q'-tag signal located further to the left of the chromosomal segment shown. ANTI-CEN signals are in red, FISH signals are in pale blue, and overlapping ANTI-CEN and FISH signals are in white. Each of the pictures is accompanied by DAPI images of chromosomes pseudo-coloured in green. A colour photograph corresponding to this figure is available upon request.

25

Figure 4 Localization of the anti-centromere antibody-binding domain. a, Relative positions of different cosmid and PAC clones within the YAC #082 contig, using YAC-3 as a reference. Cosmids are designated as YnCm, where 'n' denotes the YAC of origin and 'm' denotes the cosmid number. PACs 1-5 are five different PAC clones isolated from a human PAC library 30 (Genome Systems Inc). "HC-contig" represents a group of overlapping cosmids that map tightly around the marker centromere in ANTI-CEN/FISH experiments. A genomic map corresponding

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to the depicted YAC region was derived from the DNA of patient BE and shown above the YAC map. S. Sall; K. Kspl; N. Notl; Sf, Sfil. b, Cumulative scoring of FISH signals in ANTI-CEN/FISH experiments for cosmids Y3C64, Y6C8, Y3C94, Y7C14, Y4C45, Y6C10, Y6C21, Y3C3, PAC5, Y13C1, Y13C8, and Y17C6. The distribution of FISH signals (vertical axis) is 5 those found on the opposite arm of the chromosome. The total number of fluorescence signals scored for each of the cosmid clones is indicated in brackets. c, Restriction mapping of the 80-kb region covered by the eight overlapping cosmids of the HC-contig. These eight cosmids were derived from four different YACs (YAC-3, YAC-4, YAC-6, and YAC-7) and provided independent confirmation of the map. Furthermore, the map agreed fully with the restriction map 10 of a 120 kb-insert PAC clone (PAC4) that spanned the entire HC-contig region. E, EcoRI; R, EcoRV; N, NotI.

Figure 5 is a representation showing restriction analysis of genomic DNA of patient BE and those of his normal parents using Y6C10 as probe. DNA was resolved on a PFGE (A) or 15 standard agarose gel (B and C). Samples 1, 2 and 3 were fibroblast cultures of mother of BE, father of BE, and patient BE, respectively. Sample 4 was a somatic hybrid cell line BE2C1-18-5F containing the marker chromosome. Fragment sizes are in kilobases.

Figure 6 is a representation of the full nucleotide sequence of the HC-contig DNA derived from 20 normal human chromosome 10q 25.2 region.

Figure 7 is a diagrammatic representation of the method used to retrofit YAC3 and YAC5.

Figures 8A to J are diagrammatic representations of the different vectors used for cloning 25 DNA as YACs by the conventional restriction/ligation methods.

Figures 9 is a diagrammatic representation of circular TAR summarising the recombination process.

30 Figure 10 is a diagrammatic representation showing modification of TAR vector.

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Figure 11 is a diagrammatic representation of the cloning of 10q25 human neocentromere DNA from mardel (10) chromosome. This DNA is designated NC-contig DNA to distinguish it from the HC-contig derived from the corresponding region of the normal chromosome 10. (A) Structural map of the NC-contig region and flanking DNA. Arrows indicate the relative 5 positions and directions of primers used in PCR analyses (Table 3). The restriction sites *EcoRI*, EcoRV, Srfl, and SftI and SftI are indicated by E, R, Sr and Sf, respectively. The position of the TAR "hook" CE-F2 is represented by the solid box. The hatched bar represents HC- or NCcontig. p' and q' refer to the short and long arms of mardel (10), respectively. (B) Circular TAR strategy using the vectors pVC39-Alu/C3-F2(+) and pVC39-Alu/C3-F2(-) for the direct 10 cloning of the neocentromere DNA from mardel (10). The position of the Alu consensus sequence hook is represented by the white box. Crosses denote the sites of recombination between the TAR vector and the genomic DNA at the Alu and C3-F2 hooks during cloning. (C) Structural maps of the resulting circular YACs 5f-52-E8 and 5f-38-F2 containing the neocentromere DNA of the mardel (10) chromosome. The DNA flanking the NC-contig is 15 represented by stippled bars. (D) Structural maps of BAC/E8-1 and BAC/F2-14. Nt represents NotI and URA-BAC-neo represents the retrofitting vector BRV1 (Larionov et al., 1997).

Figure 12 is a diagrammatic representation showing specific TAR of HC-region from mardel 10.

20

The method was as follows: (1) Co-transformation into YPH857; (2) Select HIS⁺ colonies; (3) screen for HC-region by PCR; (4) Prepare high-MW DNA; (5) Digest with I-Sce1 to expose hTELS; (6) Transfect HT 1080 cells; (7) Select for G418^R; and (8) analyse by PFGE and FISH.

25 Figure 13 is a diagrammatic representation showing cloning in yeast as YAC/HAC.

Figure 14 is a diagrammatic representation outlining TACT procedure.

Figure 15 is a diagrammatic representation of TACT constructs.

30

Figure 16A is a representation of the full nucleotide sequence of the NC-contig DNA derived

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from mardel (10) and corresponds to the HC-contig DNA region of the normal chromosome 10.

Figure 16B is a representation of the partial nucleotide sequence of the BAC/F2-14 clone that is derived from a region immediately p' of the NC-contig DNA (see Fig. 11D).

5

SUMMARY OF SEQ ID NOs.

	SEQ ID NO.	DESCRIPTION
	1	DNA primer
5	2	DNA primer
	3	Nucleotide sequence of HC-contig
	4	Nucleotide sequence of NC-contig
	5	BAC-F2 contig 1
	6	BAC-F2 contig 2
0	. 7	BAC-F2 contig 3
	8	BAC-F2 contig 4
	9	BAC-F2 contig 5
	10	BAC-F2 contig 6
	11	BAC-F2 contig 7
5	12	BAC-F2 contig 8
	13	BAC-F2 contig 9
	14	BAC-F2 contig 15
	15	BAC-F2 contig 33
	16	BAC-F2 contig 39
0	17	BAC-F2 contig 41
	18	BAC-F2 contig 42
	19	BAC-F2 contig 44
	20	BAC-F2 contig 47
	21	BAC-F2 contig 47 fragment 1
25	22	BAC-F2 contig 47 fragment 2
	23	BAC-F2 contig 47 fragment 3
	24	BAC-F2 contig 47 fragment 4
	25	BAC-F2 contig 47 fragment 5
	26	BAC-F2 contig 47 fragment 6

5

27	BAC-F2 contig 47 fragment 7
28	BAC-F2 contig 47 fragment 8
29	BAC-F2 contig 47 fragment 9

ABBREVIATIONS USED IN THE SUBJECT SPECIFICATION

•	mardel (10):	Marker chromosome from patient BE; comprises a rearrangement of chromosome 10.
	HAC:	Human artificial chromosome
	YAC:	Yeast artificial chromosome
10	MAC:	Bacterial artificial chromosome
	PLAC:	Plant artificial chromosome
	neocentromere:	A centromere containing no substantial α -satellite DNA
	CENP:	Centromere binding protein
	HC-contig:	Region of normal chromosome 10 comprising neocentromere
15	E8:	q' end/region of mardel (10) neocentromere
	F2:	p' end/region of mardel (10) neocentromere
	BE:	Patient from which mardel (10) identified
	TAR:	Transformation-associated recombinant
	PCR:	Polymerase chain reaction
20	Marker neocentromere:	neocentromere on mardel (10).
	NC-contig	region of mardel (10) chromosome comprising neocentromere

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

25 The present invention is predicated in part on the identification and isolation of nucleic acid molecules exhibiting neocentromeric properties. In accordance with the present invention, a neocentromere is considered a centromere which does not contain substantial α-satellite DNA repeat sequences and, when activated, is capable of functioning as a centromere. The term

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"substantial" in this context means that the nucleic acid molecule does not contain detectable α-satellite by FISH analysis under medium stringency conditions. The neocentromere may contain a small number of highly diversed α-satellite DNA. In primates, α-satellite DNA is consider 171bph in length. An nucleic acid molecule containing an activated neocentromere or a neocentromere otherwise functioning as a centromere facilitates in accordance with the present invention, the nucleic acid molecule replicating, remaining extra-chromosomal and segregating with cell division. Reference herein to "neocentromere" is taken to mean a centromere substantially devoid of α-satellite DNA repeat sequences.

10 Accordingly, one aspect of the present invention provides an isolated nucleic acid molecule comprising a sequence of nucleotides which defines an eukaryotic neocentromere.

More particularly the present invention provides an isolated nucleic acid molecule comprising a sequence of nucleotides derived from a eukaryotic chromosome and encompassing a neocentromere which nucleic acid molecule when introduced into a compatible cell is capable of replicating, acting as an extra-chromosomal element and segregating with cell division.

The present invention is exemplified herein by the identification and cloning of a human neocentromere. This is done, however, with the understanding that the present invention extends to all eukaryotic neocentromeres such as from mammalian, plant, aviary, insect, fungal, yeast and reptilian chromosomes. The most preferred neocentromere, however, is from human chromosomes and their mammalian homologues.

The present invention is predicated in part on the identification of an unusual chromosomal marker in a patient designated "BE". The chromosomal marker is referred to as "mardel (10)" and results from a rearrangement of human chromosome 10. The mardel (10) marker is mitotically stable and, in accordance with the present invention, contains a functional neocentromere at a location regarded as non-centromeric. The neocentromere at mardel (10) is located between q24 and q26 on chromosome 10 and more particularly around q25. Even more particularly, the neocentromere maps to q25.2 on chromosome 10. The present invention is exemplified by DNA cloned from the q24-q26 region of the mardel (10) chromosome as well

as the corresponding region on normal human chromosome 10. These DNA molecules contain a functional neocentromere. The present invention extends, however, to any neocentromere or any chromosome in mammalian and non-mammalian animals as well as plants, yeasts and fungi.

5

For convenience, the DNA clones from the mardel (10) chromosome as well as from normal human chromosome 10 are summarised in Figure 11. The neocentromere located at or around 10q25 is located on a clone designated the "HC-contig". DNA clones from mardel (10) are referred to as "E8" or the "NC-contig" which extends from the long arm (q') of mardel (10) towards the short arm (p'). Clone F2 extends further p' from E8 (see Figure 11). It is emphasised, however, that the present invention extends to any neocentromere on any human chromosome as well as neocentromeres on other mammalian and non-mammalian chromosomes including chromosomes from plants, insects, reptiles, yeast and fungi.

- 15 The present invention further contemplates a nucleic acid molecule or its chemical equivalent having a tertiary structure which defines a human neocentromere or a functional derivative thereof or a latent, synthetic or hybrid form thereof or its mammalian or non-mammalian homologue.
- 20 Even more particularly, the present invention is directed to an isolated nucleic acid molecule having a sequence of nucleotides or their chemical equivalents which directs a conformation defining a human neocentromere or a functional derivative thereof or a latent, synthetic or hybrid form thereof or its mammalian or non-mammalian homologue wherein the centromere associates with centromere binding proteins (CENP) -A and CENP-C or antibodies thereto.

25

Reference herein to "latent" in relation to a centromere includes reference to a centromere not normally functional but nevertheless activatable under certain conditions. A latent centromere may also be considered as a neocentromere provided it has no substantial α -satellite DNA repeat sequences.

30

The size of the neocentromere in accordance with the present invention may range from about

50 bp to about 1500 kbp, from about 70 bp to about 1000 kbp, from about 75bp to about 800 kpb, from about 80 bp to about 500 kbp, from about 85 bp to about 200 kbp, from about 90 bp to about 100 kbp, from about 100 bp to about 1 kbp, about 120 bp to about 500 bp, about 180 bp to about 300 bp. In one particular embodiment, the centromere is approximately 60-100 kbp.

5 In another embodiment, the centromere is about 80 kbp.

The nucleic acid molecule encompassing the HC-contig for human chromosome 10 of the present invention set forth in Figure 6 (SEQ ID NO: 3). The nucleic acid molecule encompassing the NC-contig (part of E8) from mardel (10) is set forth in Figure 16A (SEQ ID 10 NO: 4). The nucleic acid molecule encompassing F2 of mardel (10) is set forth in Figure 16B as separate contigs (SEQ ID NOs: 5-29). The nucleic acid molecules have a tertiary structure and the neocentromere is a conformation of nucleotides within this tertiary structure. Accordingly, the neocentromere is not defined by a linear sequence of nucleotides although this linear sequence directs the conformation which in turn defines the neocentromere. Although this 15 aspect of the present invention is exemplified using the nucleotide sequence set forth in Figure 6, 16A and 16B, the subject invention extends to any sequence directing a conformation defining a centromere and hybridising to the sequence set forth in one or more of Figures 6, 16A and/or 16B under low stringency conditions at 42°C and/or which comprises a nucleotide sequence having at least about 40% nucleotide similarity to one or more sequences set forth in Figures 6, 20 16A and/or 16B. Preferably, the percentage similarity is at least about 50%, more preferably at least about 60%, still more preferably at least about 70%, even more preferably at least about 80-90% or above such as 95%, 97%, 98% and 99%.

Another embodiment of the present invention is directed to YAC 3 and YAC 5 encompassing the HC contig and flanking sequence as well as nucleotide sequences related to YAC 3 and/or YAC 5 at the homology, similarity or hybridization levels.

Reference herein to a low stringency at 42°C includes and encompasses from at least about 1% v/v to at least about 15% v/v formamide and from at least about 1M to at least about 2M salt for 30 hybridisation, and at least about 1M to at least about 2M salt for washing conditions. Alternative stringency conditions may be applied where necessary, such as medium stringency, which

includes and encompasses from at least about 16% v/v to at least about 30% v/v formamide and from at least about 0.5M to at least about 0.9M salt for hybridisation, and at least about 0.5M to at least about 0.9M salt for washing conditions, or high stringency, which includes and encompasses from at least about 31% v/v to at least about 50% v/v formamide and from at least about 0.01M to at least about 0.15M salt for hybridisation, and at least about 0.01M to at least about 0.15M salt for washing conditions. These stringency conditions may be altered dependent on the source of DNA and other factors.

The term "similarity" as used herein includes exact identity between compared sequences at the nucleotide level. Where there is non-identity at the nucleotide level, "similarity" includes differences between sequences which nevertheless result in conformation defining a functional neocentromere.

The nucleic acid molecule of the present invention may comprise a naturally occurring nucleotide sequence from a healthy human subject or may comprise the nucleotide sequence from a human subject exhibiting one or more chromosomal-dependent conditions such as a subject carrying mardel 10 chromosome or a chromosome conferring an equivalent or similar condition or may carry one or more nucleotide substitutions, deletions and/or additions relative to the naturally or non-naturally occurring sequence. Such modifications are referred to herein as "derivatives" and include mutants, fragments, parts, homologues and analogues of the naturally occurring nucleotide sequence. Preferably, the derivatives of the present invention still define a functional neocentromere.

Reference herein to a "neocentromere" includes reference to a functional neocentromere or a functional derivative thereof meaning that it is capable of facilitating sister chromatid cohesion and chromosomal segregation during mitotic cell divisions and/or is capable of associating with CENP-A and/or CENP-C and/or is capable of interacting with anti-CENP-A antibodies or anti-CENP-C antibodies. Generally, and preferably, the neocentromere is incapable of interacting with CENP-B or anti-CEP-B antibodies. Alternatively, the neocentromere may be a latent centromere capable of activation by epigenetic mechanisms. The neocentromere may also be a hybrid of other human, mammalian, plant or yeast neocentromeres. Synthetic neocentromeres

provided by, for example, polymeric techniques to arrive at the correct confromation are also contemplated by the present invention. All such forms and definitions of neocentromere are encompassed by use of this term.

- 5 Another aspect of the present invention provides an isolated nucleic acid molecule or chemical equivalent having the following characteristics:
 - comprises a nucleotide sequence or chemical equivalent directing a conformation which
 defines a neocentromere or a functional derivative thereof or a latent, synthetic or hybrid
 form thereof or;
- 10 (ii) comprises a nucleotide sequence or chemical equivalent substantially as set forth in one or more of Figures 6, 16A and/ or 16B or having at least about 40% similarity thereto or capable of hybridising thereto under low stringency conditions at 42°C; and
 - (iii) comprises a neocentromere capable of associating with CENP-A or CENP-C or antibodies thereto.

Preferably, the neocentromere is incapable of interacting with CENP-B or antibodies thereto.

15

20

In a particularly preferred embodiment, the centromere corresponds to a human genomic region which maps between q24 and q26 on chromosome 10, and in particular q25 on chromosome 10.

The nucleic acid molecule or its chemical equivalent of the present invention defining a conformational neocentromere or functional derivative thereof or latent, synthetic or hybrid form thereof is useful *inter alia* for the generation of artificial chromosomes such as human artificial chromosomes (HACs), mammalian artificial chromosomes (MACs), yeast artificial chromosomes (YACs) and plant artificial chromosomes (PLACs). HACs are particularly useful since they are capable of accommodating large amounts of DNA and are capable of propagation in human cells.

The HACs are non-viral in origin and, hence, are more suitable for gene therapy by, for example, introducing therapeutic genes. Furthermore, the HACs remain extra-chromosomal and, hence,

have no insertional/substitutional mutagenic potential. The essence of a HAC is the presence of

30 a neocentromere or latent, synthetic or hybrid form thereof which enables stable segregation during cell division. The HAC also remains extra-chromosomal and, hence, is more suitable for

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gene therapy. Reference to "extra-chromosomal" means that it does not integrate into the main chromosome and, in effect, is episomal.

Accordingly, the present invention provides a genetic construct comprising an origin of replication for a eukaryotic cell and a nucleic acid molecule encompassing a eukaryotic neocentromere or a functional derivative thereof or a latent, synthetic, hybrid form thereof or its mammalian or non-mammalian homologue flanked by telomeric nucleotide sequences functional in the cell in which the genetic construct is to replicate and wherein said genetic construct when introduced into a cell is a replicating, extra-chromosomal element which segregates with cell division.

More particularly, the present invention further contemplates a genetic construct in the form of an artificial chromosome comprising an origin of replication for a mammalian, human, plant or yeast cell and a nucleic acid molecule encompassing a human neocentromere or a functional derivative thereof or a latent, synthetic or hybrid form thereof or its mammalian or non-mammalian homologue flanked by telomeric nucleotide sequences functional in the cell in which the artificial chromosome is to replicate.

Another embodiment provides a genetic construct in the form of an artificial chromosome comprising an origin of replication for a mammalian, human, plant or yeast cell and a nucleic acid molecule having a tertiary structure which defines a human neocentromere or a functional derivative thereof or a latent, synthetic or hybrid form thereof or its mammalian homologue flanked by telomeric sequences functional in the cell in which the artificial chromosome is to replicate.

25

Yet another embodiment is directed to a genetic construct in the form of an artificial chromosome comprising an origin of replication for a mammalian, human, plant or yeast cell and a nucleic acid molecule having a sequence of nucleotides which directs a conformation defining a human neocentromere wherein the centromere associates with CENP-A and/or CENP-C or antibodies thereto and does not contain substantial α-satellite DNA repeat sequences, said nucleic acid molecule flanked by telomeric nucleotide sequences functional in the cell which the

artificial chromosome is to replicate.

Still yet another aspect of the present invention relates to a genetic construct in the form of an artificial chromosome comprising an origin of replication for a mammalian, human, plant or yeast 5 cell and a nucleic acid molecule comprising a sequence of nucleotides which:

- (i) directs a conformation which defines a neocentromere or a functional form thereof or a latent, synthetic or hybrid form thereof;
- (ii) comprises a nucleotide sequence substantially as set forth in one or more of Figures 6, 16A and/or 16B or having at least about 40% similarity to the nucleotide sequences set forth in Figures 6, 16A and/or 16B or is capable of hybridising to one or more of these sequences under low stringency conditions at 42°C;

wherein the neocentromere is capable of associating with CENP-A and/or CENP-C or antibodies thereto and wherein said nucleic acid molecule is flanked by telomeric nucleotide sequences functional in the cell in which the artificial chromosome replicates.

15

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In a preferred embodiment, the genetic construct is a HAC and comprises human telomeric sequences. In a particularly preferred embodiment, the HAC further comprises yeast artificial chromosome (YAC) arms and, hence, becomes a HAC/YAC shuttle vector capable of propagation in human and yeast cells. Preferably, the HAC/YAC contains a unique enzyme site between yeast telomeric sequences and human telomeric sequences such that upon contact with the particular enzyme, the yeast telomeric sequences are removed leaving the human telomeric sequences. Preferably, the unique enzyme site is a yeast specific enzyme site such as I-SceI.

According to this embodiment, there is provided a genetic construct defining a HAC/YAC comprising an origin of replication and a nucleic acid molecule encompassing a human neocentromere or a functional derivative thereof or a latent, synthetic or hybrid form thereof or a mammalian or non-mammalian homologue thereof, said nucleic acid molecule flanked by human telomeric sequences which are in turn flanked by yeast telomeric sequences wherein a unique enzyme site is located between the human and yeast telomeric nucleotide sequences such that upon contact with the enzyme, the yeast telomeric sequences are removed and the human telomeric sequences are exposed.

More particularly, the present invention is directed to a genetic construct defining a HAC/YAC comprising an origin of replication and a nucleic acid molecule encompassing a human centromere or a functional derivative thereof or a latent, synthetic or hybrid form thereof or a mammalian or non-mammalian homologue thereof wherein the neocentromere associates with 5 CENP-A and/or -C or antibodies thereto and does not contain substantial α-satellite DNA sequences wherein said nucleic acid molecule is flanked by human telomeric sequences which are in turn flanked by yeast telomeric sequences wherein a unique enzyme site is located between the human and yeast telomeric nucleotide sequences such that upon contact with said enzyme, the yeast telomeric sequences are removed and the human telomeric sequences are exposed.

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Even more particularly, the present invention is directed to a genetic construct in the form of a HAC/YAC comprising an origin of replication and a sequence of nucleotides which directs a conformation defining a human neocentromere or a functional derivative thereof or a latent, synthetic or hybrid form thereof or a mammalian or non-mammalian homologue thereof wherein said neocentromere is capable of associating with CENP-A and/or CENP-C or antibodies thereto, said sequence of nucleotides flanked by human telomeric sequences which are in turn flanked by yeast telomeric sequences wherein a unique enzyme site is located between the human and yeast telomeric nucleotide sequences such that upon contact with said enzyme, the yeast telomeric sequences are removed and the human telomeric sequences are exposed.

20

Preferably, the length of the nucleotide sequence is between about 30 kpb and 1500 kpb, and more preferably between 60 kbp and 1000 kpb.

In a particularly preferred embodiment, the unique enzyme site is a yeast specific enzyme site 25 such as I-SceI.

The present invention extends to yeast cells and human cells carrying the genetic constructs of the present invention and to proteins produced therefrom.

30 The genetic constructs may also comprise marker genes and other unique restriction sites to facilitate insertion of adventitious DNA. Accordingly, the genetic constructs of the present

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invention may further comprise adventitious or heterologous DNA encoding a product of interest. Preferred products of interest include pharmaceutically useful genes such as genes

encoding cytokines, receptors, growth regulators and the like. Endogenous genes may also be

replaced by wild-type genes or modified genes.

5

The adventitious or heterologous DNA may also encode a molecule not synthesised in a sufficient amount in a particular subject and hence the increased copy number permits greater

amounts of the molecule being synthesised.

10 Accordingly, the present invention contemplates a genetic construct comprising an origin of

replication and a first nucleic acid molecule defining a human neocentromere or a functional

derivative thereof or latent, synthetic or hybrid form thereof or a mammalian or non-mammalian

homologue, a second nucleic acid molecule encoding a peptide, polypeptide or protein, wherein

said first and second nucleic acid molecules are flanked by a first set of human telomeric

15 sequences which are in turn flanked by a second set of yeast telomeric sequences wherein there

are unique enzyme sites between the human and yeast telomeric sequences such that upon

contact with said enzyme, the yeast telomeric sequences are cleaved off to expose the human

telomeric sequences.

20 Reference herein to segregate preferably means mitotically stable segregation. Conveniently,

stable segregation may be determined as the presence of an artificial chromosome in 40-60% of

daughter cells after 4-6 months of continuous passage.

The present invention extends to other artificial chromosome analogues to the HACs and

25 HAC/YACs described above such as MACs and PLACs.

Another aspect of the present invention relates to peptides, polypeptides and proteins which bind,

interact or otherwise associate with the human neocentromere of the present invention or its

mammalian and non-mammalian homologue. Preferably, the molecules are proteins, referred to

30 as primary (1°) proteins. The 1° proteins bind to the neocentromere and secondary (2°) proteins

bind to the 1° proteins before or after association with the neocentromere. The identification

of the human neocentromere in accordance with the present invention provides a mechanism for assaying 1° proteins and 2° proteins which may be important for screening chromosomes in, for example, genetic disorders. This is particularly the use in Down's Syndrome which results from defective chromosome segregation.

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The 1° proteins are readily detected by, for example, a gel shift assay. The nucleic acid molecule of the present invention defining the human neocentromere is digested, labelled and contacted with nuclear extract putatively containing the 1° proteins and resolved on a gel. When a 1° protein binds to a fragment carrying a binding portion of the neocentromere, the DNA fragment migrates in the gel at a slower rate due to the bound protein.

The present invention extends to purified 1° proteins capable of association with the subject centromere and to genetic sequences encoding same and to antibodies thereto.

15 The neocentromeres of the present invention are readily identified and characterised using, for example, human fibrosarcoma cell lines. For example, DNA suspect of carrying a neocentromere, is introduced into fibrosarcoma cells in a linear form, generally together with a telomeric sequence. The cells are then screened for the presence of replicating, extrachromosomal and segregating elements, referred to as mini chromosomes.

20

The present invention further encompasses eukaryotic cells carrying replicating, extrachromosomal and segregation nucleic acid molecules. Preferably the eukaryotic cells are mammalian cells and most preferably human cells. The nucleic acid molecules according to this aspect of the present invention are preferably as herein described. Particularly preferred cells are 25 HT-38, HT-47, HT-54, HT-190, HT-191, BAC/E8-1, and BAC/F2-14.

The present invention is further described by the following non-limiting Figures and Examples.

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EXAMPLE 1

YAC and Cosmid Probes for FISH

YACs carrying specific STSs were identified (Moir et al., 1994) by PCR-based screening of 5 YAC libraries prepared in pYAC4 vector at the Center for Genetics in Medicine at Washington University (Brownstein et al., 1989) and at the CEPH (Albertsen et al., 1990). Cosmid DNA inserts (35-40 kb) were ligated to SuperCos I vector (Stratagene) and packaged with Gigapack III Gold extract (Stratagene) according to the manufacturer's instructions. YAC probes were 5'total yeast genomic DNA using primers prepared by Alu-PCR of 5'-ID 10 GGATTACAGG(C/T)(A/G)TGAGCCA-3' [SEQ NO:11 and (A/G)CCA(C/T)TGCACTGCAGCCTG-3' [SEQ ID NO:2] according to published method (Archidiacono et al., 1994). For probe labelling, 1 µg of the YAC PCR products or whole cosmid DNA isolated by CsCl centrifugation or Qiagen column was used. The DNA was labelled with Biotin-16-dUTP (Boehringer Mannheim) using a NICK translation kit (Boehinger 15 Mannheim). A probe mix of 6-10 μg/ml of biotinylated probe DNA, 300 μg/ml of COT-1 DNA (Boehringer Mannheim), 500 μg/ml of carrier salmon sperm DNA and, where indicated, 10 µg/ml of biotinylated 10pC38 tag DNA was ethanol precipitated, resuspended in a hybridization mix of 50% v/v formamide in 2 x SSC and 10% w/v dextran sulphate, denatured at 95°C for 5 min, preannealed for 30-60 min at 37°C to suppress repetitive sequences, before adding to 20 slides. FISH of α-satellite and satellite III probes was performed under low stringency as previously described (Voullaire et al., 1993).

EXAMPLE 2

Somatic Cell Hybrids and Other Cell Lines

25

Skin fibroblasts and transformed lymphoblast cell lines were established from patient BE (Voullaire et al., 1993) and from his normal parents. The presence of the mardel 10 chromosome in the patient cell lines was confirmed by FISH. In addition to these cell lines, two somatic cell hybrids were produced by fusing cultured fibroblast cells derived from patient BE with the Chinese hamster ovary cell line CHO-K1 using polyethylene glycol. Hybrid cells were selected in a proline-free medium for the glutamic oxaloacetic transaminase-1 (GOT-1) gene located in

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10q24-q25 region. One of the hybrid cell lines, designated BE2C1-18-1f, was shown to contain the normal chromosome 10 but not the marker chromosome, while another hybrid cell line, designated BE2C1-18-5F, contained the marker chromosome but not the normal chromosome 10 of patient BE. The presence or absence of these chromosomes was established by karyotyping and ANTI-CEN/FISH probing. In addition, PCR analysis of an STS (sequence tagged site) marker, AFM259xg5, which resided on YAC-3, confirmed the status of these chromosomes in the hybrids and excluded the presence of submicroscopic fragments of the marker centromere region within the genome of BE2C1-18-1f, or the presence of the corresponding region of normal chromosome 10 within the genome of BE2C1-18-5f. Use of this STS marker also demonstrated that the mardel 10 chromosome has originated from the patient's father.

EXAMPLE 3

Antisera

15 Antiserum CREST #6 was from a patient with calcinosis, Raynaud's phenomenon, esophageal dysmotility, sclerodactyly and telangiectasia (a constellation of symptoms commonly referred to as "CREST"; Moroi et al., 1981; Fritzler and Kinsella, 1980; Brenner et al., 1981). Western blot analysis of this antiserum indicated that the primary antigens detected were human CENP-A and CENP-B. A specific anti-CENP-C polyclonal antibody, designated Am-C1, was produced by the inventors by expressing a partial mouse CENP-C polypeptide (amino acid #41 to 345) as a GST-fusion product in E. coli, followed by gel purification of the product and its use as an antigen for antibody production in rabbit.

EXAMPLE 4

25 Preparation of Standard Metaphase Chromosomes for FISH analysis

Actively replicating transformed lymphoblasts were incubated at 37°C for 17 h in the presence of 0.1M final concentration of thymidine before they were centrifuged at 2000 rpm for 10 min, washed with pre-warmed RPMI, and incubated for a further 5-6 h. 15 min before harvesting, 30 colcemid (10μg/ml) was added. Cells were harvested according to standard cytogenetic techniques using 0.075M KCl hypotonic solution for 15 min at 37°C, followed by three fixative

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washes in ice cold methanol/acetic acid 3:1, dropped onto clean glass slides, and stored dessicated at -20°C until required.

EXAMPLE 5

5 Preparation of Mechanically Stretched Chromosomes for ANTI-CEN/FISH Mapping METHOD - I

This is an adaptation of the method described by Page et al. (1995). Colcemid ($10\mu g/ml$) was added to actively dividing transformed lymphoblasts for 2-3 h, before the cells were centrifuged 10 at 1500 rpm for 10 min, washed in PBS, and resuspended in 0.075M KCl hypotonic solution for 10 min at RT at a concentration of approximately 5 x 10⁴ cells/ml; the use of fewer cells here gave better stretching of the chromosomes. 200-300µl of this suspension were then cytocentrifuged onto clean microscope slides using a Cytospin 2 (Shandon) at 1000 rpm for 5 min at high acceleration. The slides were immediately removed, placed flat in a shallow dish 15 and very gently flooded with KCM (Potassium Chromosome Medium: 120 mM KCl, 20mM Nacl. 10mM Tris-HCl, 0.5mM Na₂EDTA, 0.1% v/v Triton X-100) (Jeppesen et al., 1992). After 10 min at RT, immunofluorescence was performed without fixation (Earnshaw and Migeon, 1985; Earnshaw et al., 1989; Jeppesen et al., 1992; Jeppesen and Turner, 1993). KCM buffer was gently aspirated and 50µl of CREST#6 serum [diluted 1:50 in 1 x TEEN (1mM 20 Triethanolamine HCl, 0.2 mM Na₂EDTA, 25 mM NaCl), 0.1% v/v Triton X-100, 0.1% w/v BSA] was added to the cell area of the slide and covered with a parafilm coverslip. The slides were incubated for 30 min at 37°C, then washed very gently by flooding in 1 x KB [10 mM] Tris-HCl (pH7.7), 0.15M NaCl, 0.1% w/v BSA), three rinses of 3 min each at RT. The primary antibody was detected with Texas Red-conjugated Affini-pure Rabbit anti-Human IgG (H&L) 25 (Jackson Laboratories) diluted 1:50 in 1 x KB. 50 μl was added to each slide, covered with a parafilm coverslip, and incubated for 30 min at 37°C. The slides were again gently washed by flooding in 1 x KB for 2 min at RT, before they were fixed by flooding in 10% v/v formalin in KCM for 10 min at RT, followed by three rinses of 3 min each in distilled water. If FISH was not performed the slides were rinsed in PBS and mounted in DAP1 (0.25 µg/ml) in 30 DABCO antifade mountant. [In experiments where CREST#6 and Am-C1 antisera were simultaneously used to label the centromere (Figs. 2B and C), the above procedure was followed except for the addition of Am-Cl diluted 1:100 together with CREST#6, and the Am-Cl antibody was detected using 1:100 diluted Donkey anti-Rabbit DTAF (Jackson Laboratories)].

5 If FISH was to be performed on the slides, they were then given a second fix in 3:1 methanol/acetic acid for 15 min at RT. The slides were air dried for at least 5 min and either processed for FISH or stored at -20°C for up to several days before continuing. For FISH, the slides were dehydrated at RT in 70%, 90%, 100% v/v ethanol (2 min each) and air dried. Chromosomal DNA was denaturated in deionised 70% v/v formamide/2xSSC, pH 7.0 at 82°C 10 for 8 min followed by immediate dehydration in 70%, 90% and 100% v/v ethanol at -20°C for 2 min each, then air dried for at least 10 min. (This high temperature of denaturation was critical to obtain maximum FISH signals). An amount of 15 µl of the prepared probe was added to each slide, covered with a 22mm² coverslip, and sealed with rubber cement. Slides were hybridized overnight in a humid chamber at 37°C, then rinsed in 2 x SSC at RT, followed 15 by 3 washes of 0.1 x SSC at 60°C for 5 min each, rinsed again in 2 x SSC, and immersed in a blocking agent of 5% non fat milk in 4 x SSC for 10 min at RT. Probe hybridization was detected by incubation with FITC-conjugated avidin at 37°C for 30 min, followed by three washes of 5 min each at RT in wash buffer (4 x SSC, 0.05% v/v Tween-20). Signals were amplified by incubating with goat anti-avidin D antibodies for 30 min at 37°C, followed by 20 three washes of 5 min each at RT in wash buffer, then with another layer of avidin-FITC for 30 min at 37°C, before the slides were washed in wash buffer, rinsed in PBS, and counterstained with DAP1 (0.25 µg/ml) in DABCO mountant.

METHOD - II

25

The following method was modified from that of Haaf and Ward, (1994). Actively dividing lymphoblast cells were treated with 10µg/ml colcemid for 2-3h, washed in PBS and resuspended in a hypotonic solution consisting of 10mM Hepes (pH7.3), 30mM glycerol, 1.0mM CaCl₂ and 0.8mM MgCl₂, at a cell density of approx. 2.5 x 10²/ml. After 10 min of hypotonic treatment at RT, 300 µl were cytocentrifuged (Shandon - Cytospin 2) onto glass slides at 800 rpm for 4 min. The slides were immediately removed from the centrifuge, dried

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for 15 sec, fixed in methanol at -20°C for 20-30 min, rinsed in acetone at -20°C for a few sec, then washed in 3 rinses of PBS at RT. Immunofluorescence staining was done using CREST#6 at a dilution of 1:50 in PBS. After incubation at 37°C for 30 min, the slides were washed three times in PBS for 2 min each. This primary antibody was then detected by a further incubation for 30 min at 37°C with Texas Red-conjugated Rabbit anti-Human IgG diluted at 1:50 in PBS. The slides were fixed in 10% v/v formalin in KCM for 10 min at RT, then washed in 3 rinses of distilled water and drained. Before FISH was performed, slides were fixed in methanol/acetic acid 3:1 for 15 min at RT and air dried. Chromosomal DNA was denatured in 70% v/v deionised formamide (pH7.0) in 2 x SSC at 82°C for 4-6 min. After dehydration in an ice cold ethanol series the slides were air dried, and used for FISH as described for Method I. Slides could be stored covered in foil at RT after methanol/acetic acid fix for up to several weeks before FISH.

Both methods I and II were used to obtain the results shown in Figs. 2B, 2C, 3 and 4B.

15

EXAMPLE 6

Image Analysis

Hybridization signals for YAC mapping on standard metaphase preparations utilized a normal fluorescence microscope. Images for the ANTI-CEN/FISH experiments were analyzed on a Zeiss Axiolab fluorescence microscope equipped with a 100x objective and a cooled CCD camera (Photometrics Image Point) controlled by a Power Mac computer. Gray scale images were captured separately using a LUDL filter wheel and controller for Texas Red, FITC and DAPI. These images were pseudocoloured and merged using IPlab Spectrum software from Signal Analytics Corporation. A number of difficulties were commonly associated with the ANTI-CEN/FISH technique: (a) the deliberate "stretching" of the chromosomes, whilst increasing the resolution of mapping, sometimes caused serious distortion to the chromosomes, often making them quite dysmorphic; (b) FISH treatment following the ANTI-CEN-labelling often significantly reduced the ANTI-CEN signals; (c) more highly stretched chromosomes (which would potentially give better mapping resolution) generally gave weaker ANTI-CEN signals; and (d) the ANTI-CEN signal on the mardel 10 centromere was usually weaker than

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those of the other human chromosomes. Thus, a cell would only be considered informative and used for scoring if both the p'- and q'-arms of the mardel 10 chromosome were discernible and separated by a discrete ANTI-CEN signal. In addition, FISH signals for both the test probe and the 10pC38 cosmid tag (used to identify the q'-arm of, and thus orientate, the marker chromosome) must be clearly present. Using these criteria, the overall frequency of informative cells was found to be approximately 1 in every 20-30 metaphases analyzed.

EXAMPLE 7

Restriction Analysis of Patient DNA

10

High-molecular weight genomic DNA was extracted from cultured fibroblast cell lines of patient BE and those of his parents and digested with different enzymes to generate restriction fragments ranging from <1kb up to ~1 Mb. The digested DNA was resolved either on a standard agarose gel or by pulsed-field gel electrophoresis (PFGE) using a Bio-Rad CHEF-XA Mapper. For filter hybridization, 50-100 ng of whole cosmid or PAC DNA was labelled by random priming. The labelled probe was then added to 2 ml of hybridization buffer (0.5M Na₂HPO₄, 7% w/v SDS, 1% w/v BSA, 1mM EDTA, pH. 7.0) containing 500 μg of human placental DNA (Sigma). The mixture was boiled for 5 min, then placed in a 65°C water bath for preannealing of repetitive DNA for 90 min. The preannealed probe mix was then added to prehybridizing filters and hybridized overnight at 65°C. Post-hybridization washes were at a final stringency of 0.1 x SSC, 0.1% w/v SDS at 68°C.

EXAMPLE 8

Identification of a YAC region spanning the marker centromere

25

The initial search for DNA sequences spanning the centromere of the mardel 10 chromosome was based on fluorescence in situ hybridization (FISH) of existing cosmid and YAC clones (Moir et al., 1994; Zheng et al., 1994) that have been mapped to the q24 - q26 region of the normal human chromosome 10 where the new marker centromere was formed (Voullaire et al., 1993) (Fig. 1A). This search led to the identification of a 4 megabase YAC contig (designated #082) that spanned the marker centromere region (Fig 1B). Fig. 1C graphically presents the

FISH mapping results with selected YACs from this contig. As can be seen, two of the YACs (YACs-1 and YAC-2) mapped to the q'-side of the marker centromere, whereas the remaining YACs mapped to the p'-side of the centromere. The low signal level observed for YAC-3 was due to a large proportion of this probe hybridising directly on the centromere itself. These results, therefore, provided evidence that YAC contig #082 spanned the marker centromere, and that the centromere region was likely to be within YAC-3, where the "cross-over" between the q' and p' signals occurred.

10 EXAMPLE 9

Development of Improved ANTI-CEN/FISH Methods for the Simultaneous Detection of Marker Centromere and Single-copy Cosmid DNA Probes

Although normal fluorescence microscopy and FISH analysis of standard metaphase chromosomes were adequate for the initial identification of the YAC contig spanning the marker centromere, methods with significantly higher sensitivity and resolution were needed to allow further walking into the marker centromere DNA. Three requirements have to be satisfied by these methods: (a) the metaphase chromosomes have to be extended to offer much greater mapping resolution, (b) the centromeres have to be more precisely defined than that offered by a cytogenetic constriction, and (c) the methods should allow simultaneous visualization of both the centromere antibody and FISH signal. Two published methods were explored (designated here as ANTI-CEN/FISH methods) based on extending metaphase chromosomes by mechanical stretching and labelling of the neocentromere by autoimmune antibodies (Haaf and Ward, 1994; Page et al., 1995). Since these methods were originally established for the labelling of normal centromeres and for FISH analysis of highly repeated DNA, they were modified (see Example 4) to allow detection of the generally reduced ANTI-CEN signal of the subject marker neocentromere and the lower FISH signals resulting from the use of single-copy cosmid DNA probes.

30 With the improved detection methods, the status of α-satellite and satellite III DNA on the marker neocentromere was reassessed, since this was previously determined using standard

microscopy and FISH (Voullaire et al., 1993). Fig. 2A shows the result of antibody labelling using CREST#6 and FISH using α-satellite DNA, and indicated the absence of detectable signal on the marker centromere. The same result was obtained when the experiments were repeated without ANTI-CEN-labelling, ruling out the possibility that the anti-centromere antibody might have obscured any weak FISH signals. Similar results were obtained with satellite III DNA. Since in separate reconstruction experiments, it was possible to demonstrate the sensitivity of the procedure in detecting a single-copy DNA probe of less than 1.5 kb, and making the reasonable assumption that the low-stringency hybridization conditions used for the α-satellite and satellite III DNA which, by virtue of the use of >100-fold excess of probes and the strong hybridisation of these probes to all the other centromeres, would have allowed the detection of any related sequences, it can be concluded that these satellite are absent.

EXAMPLE 10

Co-localization of CENP-C and CENP-A on the Marker neocentromere

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To test if CENP-C is present on the marker centromere, a specific rabbit polyclonal antibody was prepared against a recombinant product of mouse CENP-C. This antibody, designated Am-C1, reacted strongly with the centromeres of rodent and human chromosomes. Fig. 2B shows results for the labelling of stretched human metaphase chromosomes using this antibody simultaneously with the CREST#6 autoimmune antibody. As can be seen, irrespective of the degree of chromosome stretching, the signals for the two antibodies coincided fully on all the centromeres. The localization of these two antibodies on the marker chromosome was further determined by employing the 10pC38 cosmid tag in an ANTI-CEN/FISH experiment to identify the marker chromosome. The results indicated that both the antibody signals were clearly present and again coincided completely on the marker centromere (Fig. 2C, a-e). Although CREST #6 was known to bind CENP-A and CENP-B, indirect evidence suggests that binding to the marker centromere presumably occurred via CENP-A since the presence of the marker centromere was previously demonstrated not to bind CENP-B (Voullaire et al., 1993). The above results, therefore, established the localization of CENP-C, and probably CENP-A, on the marker centromere.

EXAMPLE 11

Localization of the anti-centromere antibody-binding domain

For further walking into the marker centromere region, cosmid libraries were prepared from total 5 yeast genomic DNA containing YACs-2, -3, -4, -6, -7, -13, and -17. Cosmid clones containing human DNA inserts were isolated by hybridization with human COT-1 DNA using low stringency. All resulting cosmids were screened by standard FISH to confirm their localization to the expected marker centromere and normal chromosome 10 regions, and to eliminate clones that might have originated from other genomic sites due to chimeric YACs. Positive clones were 10 then analyzed further with the ANTI-CEN/FISH methods, using CREST#6 to label the centromere. Fig. 3a (I and II) show examples of cosmid signals that mapped to the q'- and p'side, respectively, of the marker centromere in the ANTI-CEN/FISH experiments. The cosmid tag (clone 10pC38) was used in these experiments to define the q' arm of the marker chromosome. For cosmid walking, we concentrated on clones derived from YAC-3 since FISH 15 mapping of YAC contig #082 indicated that the marker centromere region was likely to be within this YAC. Fig. 4a shows a restriction map of the region covered by this and surrounding YACs and compares this map with a genomic map derived from patient BE. The relative positions of a series of cosmid clones (including five independent PACs) were also determined and placed on the YAC map. Fig. 4b presents the ANTI-CEN/FISH results obtained with a number of the 20 cosmid clones and one of the PAC clones. Clones Y3C64, Y6C8, and Y3C94 localized preferentially to the q'-side, while Y13C1+C8 and Y17C6 localized preferentially to the p'-side of the marker centromere, suggesting that the nucleus of the antibody-binding domain is situated between these two cosmid clusters. Within this central region, a group of cosmid clones comprising the HC-contig (Fig. 4a) was found to map closely around the ANTI-CEN signal. Fig. 25 4c shows a restriction map for eight different overlapping clones from this HC-contig. The chromosomal positions of five of these overlapping clones were analyzed in detail using ANTI-CEN/FISH. Fig. 4b shows the cumulative results for more than 60 informative chromosomes for each of these five probes. The results indicated that Y7C14 mapped preferentially q'- of the antibody-binding domain, while the remaining four clones (Y4C45, Y6C10, Y6C21 and Y3C3) 30 mapped preferentially to the p'-side. In addition, the results for PAC5 (a 75 kb-insert PAC clone that overlapped with the p'-end of PAC4 by approximately 5 kb; see Fig. 4a) provided further evidence for the emergence of the HC-contig region onto the p'-arm. Based on these results, we conclude that the eight contiguous cosmid clones within the HC-contig shown in Fig. 4c, which together constitute ~80 kbp of DNA, have defined the nucleus of the antibody-binding domain of the marker centromere.

5

From the above ANTI-CEN/FISH results, it was difficult to determine if the sequences of the HC-contig and its surrounding DNA, both originally derived from a normal individual, were part of the marker centromere DNA, or whether these sequences simply flanked a transposed centromere DNA with an unrelated nucleotide composition. However, supporting evidence from the ANTI-CEN/FISH experiments suggested that the DNA of the HC-contig region appeared to be a part of the marker centromere. This came from the mapping of Y6C10 and Y6C21 onto superstretched chromosomes that were occasionally detected in the slide preparations. An example of such mapping is shown in Fig. 3b using Y6C21. As can be seen, whilst a significant portion of Y6C21 hybridized to the p'-side of the CREST signal on the highly extended chromosome, a substantial portion of the cosmid DNA also overlapped directly with the CREST signal. This suggests that at least part of the HC-contig region actually comprises the same DNA sequence as the marker centromere. This possibility was further investigated by detailed genomic mapping.

20

EXAMPLE 12

The Marker Centromere DNA has a Similar or Identical Sequence Organization as the HC-Contig

The genomic organization of the HC-contig region was compared with that of the corresponding DNA region of the mardel (10) chromosome. Three overlapping cosmids (Y7C14, Y6C10, and Y4C7, the latter being essentially the same as Y6C21; Fig. 4C) from the HC-contig were used as probes to analyze the restriction patterns of genomic DNA prepared from patient BE and those of his karyotypically normal parents. Fig. 5 shows examples of the band patterns obtained with Y6C10, while Table 1 summarizes the results for all the enzymes tested with Y7C14, Y6C10 and Y4C7. The detection of a single band on PFGE gels with a number of the enzymes indicated that the cosmid DNA sequences were unique within the

human genome (Sfil, Sall, Kspl, Kpnl and Bcll in Fig. 5A; Table 1). The detection of a single on PFGE gels with a number of the enzymes (ClaI in Fig. 5A; Table 1) could be explained by differential methylation of different restriction sites found in this region (Nelson and McClelland, 1991); the reproducibility of these multiple band patterns ruled out incomplete 5 digestion as a possible cause. The multiple bands detected with the more frequent cutting enzymes on a standard gel (Fig. 5B and Table 1) were a result of the presence of cleavage sites present within the probe DNA, since similarly digested cosmid DNA electrophoresed next to the genomic DNA yielded identical patterns for all the bands not containing cosmid vector sequences. In all, 37 enzymes were used to generate more than 160 different fragments for the 10 three cosmid probes (Table 1). The results indicated that, except for a polymorphic fragment found in one of the parents, an identical banding pattern was present in the genomic DNA of patient BE and those of his parents. Furthermore, when the restriction patterns obtained for the genomic DNA of patient BE were compared with those of the smatic hybrid cell line BE2C1-18-5F, which contained the marker chromosome but not the normal chromosome 10, no 15 detectable difference was seen between the two DNA preparations within the HC-contig region (Fig. 5C).

In addition to Y7C14, Y6C10 and Y4C7, a host of other probes from within or surrounding the HC-contig have been tested, each with an average of 12 different informative enzymes. These 20 probes included PAC4 (which spanned the entire HC-contig region shown in Fig. 4C), Y3C64, Y3C109, Y6C6, Y6C8, Y3C94, PAC1, Y3C90, Y4C4, Y4C8, Y4C13, and Y3C33. The results again indicated identical restriction enzyme patterns between patient BE and normal DNA. Thus, through the analysis of a relatively large number of probes covering about 500 kb of YAC-3 around the HC-contig region, and the use of a high density of restriction enzymes that 25 generated a range of fragments from <1 kb to ~1 Mb, it was evident that the marker centromere DNA and a substantial stretch of its adjoining regions showed no detectable difference against the corresponding genomic region of the normal chromosome 10.

Since a potential limitation of the above Southern blot analyses was that highly repeated sequences were not detected because of the preannealing step used in the hybridisation procedure, a different approach was employed to compare the DNA of the marker chromosome

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and that of the normal chromosome 10. In this approach, oligonucleotide primers from different regions of the HC-contig were used to prepare a series of PCR fragments from the BE2C1-18-5F and BE2C1-18-1F hybrid cell lines. Electrophoretic comparison of such fragments, which randomly covered approximately 40 kb of the HC-contig, indicated no detectable difference between the two chromosomes and provided independent support for the results obtained in the Southern blot analyses. Thus, it can be concluded that the sequence organization of the marker centromere region is similar, if not identical, to that found in the HC-contig region of the normal chromosome 10.

10

EXAMPLE 13

Implications for Centromere Study and Mammalian Artificial Chromosome Construction

15 The mammalian centromere has been difficult to study due to the massive amount of repetitive DNA normally associated with it. By avoiding such repetitive DNA and analyzing the unusual centromere found in the present marker chromosome, the inventors have created a much more tractable system for centromere studies. The present analysis has already shed some light on the important question of DNA sequence versus conformational requirement of a centromere, and 20 on the intriguing concepts of latent centromeres and epigenetic mechanisms. One urgent application of this DNA is to use it to identify the primary protein(s) which binds to the centromeric DNA. Another important application of the marker centromere DNA is in the construction of mammalian artificial chromosomes. Such artificial chromosomes offer a potentially powerful vehicle for the structural and functional analysis of chromosomes, for the 25 genetic manipulation of plants and animals, and for the stable transmission of therapeutic genes in human gene therapy. The artificial chromosomes require a functional mammalian centromere, and the marker centromere DNA element of the present invention now provides a suitable centromere especially because of its relatively small size in the absence of α -satellite DNA and its cloning stability, as indicated by the cosmid, YAK and BAC clones of the HC-contig and NC-30 contig.

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EXAMPLE 14

Sequence analysis

Figures 6, 16A and 16B show partial nucleotide sequences for the HC-contig (SEQ ID NO: 3) 5 NC-contig [SEQ ID NO: 4] and F2 (BAC/F2-14) [SEQ ID NO: 5-29] regions, respectively.

EXAMPLE 15

Human Artificial Chromosome (HAC)

10 The following are examples of the different approaches being used in the inventors' laboratory for the production of a HAC:

Retrofitting of HC-contig DNA from normal chromosome 10

- 15 This procedure aims to produce HACs of 100 kb to >1Mb using the region of the normal chromosome 10 containing and surrounding the HC-contig DNA. The generation of a HAC by this approach will provide crucial proof that this normal DNA region can be reactivated to form a functional centromere.
- 20 A retrofitting procedure suitable for introducing human telomeres to both ends of any YAC prepared in the pYAC4 vector in the yeast host strain AB1380 has been previously described (Larin et al., 1994; Taylor et al., 1994, 1996). YACs (in particular YAC-3 and YAC-5) spanning the normal HC-contig region are used for retrofitting by plasmid constructs designed to recombine with their pYAC4 vector arms (Figure 7). The construct pLGTEL 1 is used to target the left arms of the YACs. This serves to add a LYS2 yeast selectable marker, gpt element for ultimate selection in mammalian and avian cell culture, and a human telomere. The right arm of the YACs are targeted by homologous recombination with pRANT 11 to produce a final construct where additional markers are introduced along with a second human telomere to cap the construct. Specifically, an ADE2 yeast marker is added and the URA3 gene of the YAC is 30 disrupted, serving a useful role in negative selection of the construct. A neomycin (neo)

resistance gene shown to function in mammalian and avian cells is also introduced. The finished

constructs are transfected into different cultured cell lines, including HT1080 (of human sarcoma origin) (Larin et al., 1994; Rasheed et al., 1974), DT40 (a recombination-proficient chicken cell line) (Dieken et al., 1996), and BE2CI-18-5f (a human/hamster somatic hybrid cell line containing the mardel (10) chromosome but not the normal chromosome 10).

5

In vitro cloning of HC-region into YAC/HAC vectors

The different vectors used for the cloning of the normal and mardel (10) centromeric DNA in the preparation of HACs are summarised in Table 2.

10

A number of different YAC cloning strategies are employed:

Conventional YAC cloning approach. Figures 8A-D show the different vectors used for cloning DNA as YACs by the conventional restriction/ligation methods. These YACs can then be shuttled into mammalian cells and tested for HAC function.

ALU-ALU circular TAR cloning approach. Transformation-associated recombination (TAR) in the yeast S. cerevisiae, is a method for constructing linear and circular YACs from mammalian DNA (Larionov et al., 1996a, 1996b). The recombination process is shown in Figure 9. Briefly,
the technique involves the use of a vector (pVC39-AAH2, Fig. 8E) lacking an autonomous replicating sequence (ARS) but containing a functional yeast centromere (e.g. CEN6) and selectable marker (e.g. HIS3), and two ALU DNA hooks to trap mammalian DNA by recombination at ALU sequences after co-transformation of linearized vector and high molecular weight DNA into yeast spheroplasts and followed by selection on medium lacking histidine. The
key to the process is that the mammalian DNA provides an ARS (11-bp sequence found frequently in mammalian DNA) which allows the HIS+/CEN vector to replicate as a circular YAC. These YACs are very stable and range in size from 100 kb to greater than 600 kb (Larionov et al., 1996b).

30 pVC39-AAH2 vector is used to clone DNA from hybrid BE2CI-18-5f to make YACs with an average insert of 250 kb. This TAR vector is further modified to create pAAH-TCNa (Fig. 8G)

so that it has the ability to shuttle between yeast and mammalian cells (as outlined in Figure 10), including the potential to expose human telomeres (TEL) at each end of a cloned fragment using a unique restriction site I-SceI.

5 Semi-specific and specific circular TAR. A modified circular TAR method utilising two specific 5'C and 3'C DNA hooks (300-700 bp in size) may be used to clone a specific human DNA at a frequency of 3/1000 HIS⁺ transformants. The inventors prepared the vectors pVC39-ALU/C3-F2(+/-) and pTCN-TCS (Table 2) to perform semi-specific and specific TAR cloning, respectively.

10

The Semi-specific TAR methodology is a modification of a specific circular TAR strategy which permits the site directed isolation of target chromosomal DNA. Furthermore, in accordance with the present invention, the methodology described herein enables the site-specific cloning of target chromosomal DNA from total genomic DNA as a circular YAC at relatively high frequencies and without the need for the construction and extensive screening of complex libraries made from genomic DNA.

In a preferred embodiment of the present invention, the methodology employs a single specific DNA hook which flanks the mardel (10) chromosome and a less specific Alu-hook to trap the 20 other side of the target DNA.

In initial experiments, a unique repeat DNA-free, 1.4kb *Eco*RI fragment (designated C3-F2) was identified from the p' side of the 80-kb HC-contig (Fig. 11A) (du Sart *et al.*, 1997). This fragment was subcloned into the centromere-based yeast circular TAR vector, pVC39-AAH2, by replacing the existing BLUR13 *Alu* (Larionov *et al.*, 1996b) to create the pVC39-ALU/C3-F2

constructs. As the specific orientation of the C3-F2 sequence on the chromosome was not known, the fragment was cloned in two different orientations, for which the (+) orientation (Fig. 11B) was expected to trap the genomic region to the left of C3-F2, while the (-) orientation was expected to trap the region to the right. Both constructs were used in yeast transformation.

30

As a source of genomic DNA containing the neo-centromere, a somatic hybrid cell line, BE2C1-

18-5f (du Sart et al., 1997), containing the mardel 10 chromosome but not the normal human chromosome 10 was used. 5µg of high-molecular-weight DNA from this cell line and 1µg of pVC39-ALU/C3-F2(+) or pVC39-Alu/C3-F2(-) (linearized with SmaI to expose the 0.21-kb Alu and 1.4-kb C3-F2 hooks) were co-transformed into 109 (previously prepared and stored frozen) 5 spheroplasts of S. cerevisiae YPH857 which carries a HIS3 gene deletion, (Sikorski and Hieter, 1989) and grown on SD, without HIS medium, (Larionov et al., 1996a;b) to yield between 10 and 100 HIS+ colonies. Control experiments in which YPH857 was transformed with vector alone did not produce any colonies, indicating that the C3-F2 fragment lacked ARS-like sequences. Twenty TAR experiments were performed and HIS+ colonies were picked into 96-10 well trays containing YPD medium (supplemented with 50µg/ml ampicillin and 15µg/ml tetracycline), grown at 30°C with aeration for 24h and stored in 20% (v/v) glycerol at -70°C. Total yeast DNA was prepared in pools of 48 (Kwiatkowski jr et al., 1990) and screened by PCR with the primers norm 5 and norm 7 (Table 3) which are located 30-kb q' of C3-F2 (Fig. 11A). Two desired positive clones, designated 5f-52-E8 and 5f-38-F2, which contained the neo-15 centromere DNA derived from mardel 10 and mardel (10) and the DNA immediately p' of the neocentromeric DNA, respectively, were identified. For subsequent studies, these clones were grown on SD without HIS medium and single colonies were re-isolated for characterization.

Initially, the sequence nature and sizes of the 5f-52-E8 and 5f-38-F2 insert DNA were determined. High-molecular-weight DNA was prepared in agarose blocks and digested with an enzyme (SrfI) that linearized with YAC (Fig. 11A). The linearized DNA, as well as uncut intact DNA, were resolved by pulsed-field gel electrophoresis (PFGE), transferred onto a nylon membrane and probed with radiolabelled PAC4, a P1-derived artificial chromosome clone containing a 120-kb insert that spans the entire HC-contig from normal chromosome 10, (du Sart et al., 1997) following preannealing with human placental DNA to suppress repetitive DNA. The intact 5f-52-E8 and 5f-38-F2 remained trapped in the electrophoretic wells and the linearized DNA migrated into the gel and demonstrated a size of approximately 110 kbp and 80 kbp, suggesting insert sizes of about 105 kbp and 75 kbp, respectively (given that the vector size is 5.9 kb).

30

to be free from normal chromosome 10 material, it is desirable to independently confirm the mardel (10) -origin of the 5f-52-E8 YAC clone. This was achieved using a set of primers (norm 17 and 18; Fig. 11A) that detected a variable-number-tandem repeat (VNTR) region within the HC-contig/neocentromere region. The results clearly indicated the presence of a 1.4-kb PCR product that was specific for the mardel (10) chromosome (Table 3).

PCR was used to further compare the 5f-52-E8 DNA with the previously cloned HC-contig sequence derived from normal chromosome 10. PCR products with sizes ranging between 0.2 and 15.9 kb were generated by standard PCR or with the Expand Long Template PCR system 10 (Boehringer-Manneheim). Products greater than 1 kb were digested with frequent cutting enzymes, RsaI and BsiXI, and their fingerprints were compared by agarose gel electrophoresis. The results, shown in Table 3, indicated the absence of any detectable difference between the 5f-52-E8 DNA and those of the corresponding regions of the normal chromosome 10 (in somatic cell hybrid BE2C1-18-1f) and the neocentromere region of mardel (10) (in somatic cell hybrid 15 BE2C1-18-5f). These results also demonstrated that the YAC 5f-52-E8 spanned at least 75 kb of the HC-contig region (Fig. 11C), consistent with the size determined by PFGE. Furthermore, the ability of all the internal primers to amplify DNA from 5f-52-E8 strongly suggested that the YAC was not chimeric. This result was confirmed by isolating DNA from four single-colony isolates of 5f-52-E8, digesting these with EcoRI and EcoRV, and probing with radiolabelled 20 PAC4. The hybridization patterns obtained with these enzymes were consistent with those established in the previous study (du Sart et al., 1997). Thus, this analysis, based on cloned DNA derived directly from mardel 10, has provided confirmation that the neocentromere DNA region is structurally identical to that of the corresponding HC-contig region of the normal chromosome 10 (du Sart et al., 1997).

25

The circular YACs 5f-52-E8 and 5f-38-F2 were further retrofitted with the yeast-bacterial-mammalian cells shuttle vector BRV1 as previously described (Larionov *et al.*, 1997). The resulting BAC clones were designated BAC/E8-1 and BAC/F2-14, respectively (Fig. 11D).

30 The specific TAR strategy is outlined in Figure 12 and uses unique fragments from the HC-contig region, such as the ends of PAC4 (a 120 kb-insert PAC clone containing the HC-region)

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to create the YAC/HAC shuttle vector pTCN-TCS. An example of a YAC/HAC construct containing the HC-contig region of normal chromosome 10 is shown in Fig 13.

Completed constructs are transfected into different cultured mammalian or chicken cells (see above) by lipofection using Transfectam or DOSPER.

In vivo "cloning" of HC-region into HAC vectors

This strategy employs a technique known as Telomere Associated Chromosomal Truncation (TACT) (Fig. 14). The technique is based on the principle that cloned mammalian telomeric DNA when reintroduced into a mammalian cell can seed the formation of a new telomere at an intrachromosomal location. If the introduced telomeric DNA is targeted to a known site through homologous recombination, integration at that location and subsequent truncation of distal sequences on the original chromomosomal arm can result (Brown et al., 1994; Farr et al., 1995).

15 This technique is employed in our own study to truncate the mardel 10 chromosome on either side of the HC-contig/core centromeric DNA element to produce in vivo a stable HAC of minimal size.

Figure 15A shows an example of TACT-construct used in our study. Key features of this construct are: (a) Cloning of the pericentric human genomic DNA in both orientations (+/-). This is necessary since we do not know the chromosomal orientation of this DNA. This DNA is used to target the human telomeric sequences to locations on either side of the HC-contig region on mardel 10. Genomic DNA is derived from several different sources including Y2C24, Y3C64, Y3C109, Y3C94, Y13C12, Y13C15, Y17C6, Y17C8. The resulting truncation derivatives produced using these genomic DNAs will vary in size accordingly. (b) The termini contain 2.4 kilobases of tandem repeat human telomeric DNA (htel). This DNA has been shown previously to act as a substrate for mammalian telomerase to allow seeding of a complete telomere tens of kilobases in length. (c) The hygromycin (Hyg) resistance gene allows for positive selection of mammalian cell lines containing construct sequences integrated into the genome. This is the initial screening procedure. In addition, some constructs contain the neomycin phosophotransferase gene (Neo) rather than Hyg. (c) The Herpes simplex thymidine kinase (TK)

gene is used for negative selection against non homologous integration events into the genome. Those cell lines containing the TK gene can be selected against by adding the nucleoside analogue gancyclovir.

5 Figure 15B shows another example of TACT-construct used in our study. In addition to the features of the linearised construct shown in Fig. 15A, specific additional features are: (a) The incorporation of tandem telomeric blocks (htel.htel) since others have shown these to have the highest seeding efficiency of new telomeres in mammalian cells. (b) The incorporation of yeast selectable marker (eg. URA3), DNA origin of replication (eg. ARS), and centromere (eg. 10 CEN6), to allow transfer and maintenance of the resulting truncation derivatives into yeast. This should facilitate further characterisation and manipulation, such as the introduction of therapeutic genes for gene therapy purposes. (c) The relocation of the TK gene adjacent to the genomic DNA to increase the effectiveness of the negative selection system. (d) The human growth hormone (GH) gene has been included to allow proof of principle that human genes can be 15 introduced into a HAC and expressed under the control of endogenous regulatory elements. This is essential for gene therapy applications of the resulting HAC. (e) A CMV promoter upstream of a P1 phage loxP site (CMV/loxP) has been included to allow introduction of large human genes into a HAC in vivo. A plasmid containing a gene of interest, a second loxP site and a promoterless selectable marker gene is introduced into a mammalian cell line containing the 20 HAC. Transient expression of CRE recombinase results in recombination between the two loxP sites within the cell, thereby integrating the introduced plasmid into the HAC and placing the selectable marker gene next to the CMV promoter to allow for marker selection.

For chromosomal truncation, the above TACT-constructs are transfected into a somatic cell hybrid line BE2CI-18-5f containing the mardel (10) chromosome. Positive selection is applied for Hygromycin or Geneticin resistance whereas negative selection is applied against the Thymidine Kinase Gene. Resulting colonies are further screened with distal p' and q' DNA fragments to ascertain the presence or absence of the two mardel 10 chromosome arms. In addition to the BE2CI-18-5f cell line, a human/chicken somatic cell hybrid line (derived from the recombination-proficient DT40 chicken cell line; Dieken *et al.*, 1996) containing the mardel (10) chromosome will also be generated and used.

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EXAMPLE 16

Analysis of HAC

Irrespective of which of the approaches described above is used, the presence of a new product in a mammalian cell line as an extrachromosomal, artificial chromosome, will be assessed by fluorescence in situ hybridisation (FISH) analysis, as well as tested by extracting high molecular weight DNA to determine independently existing chromosomal entity on pulsed field gel. The stability of the construct through successive cell division, both in the presence and absence of drug-resistance selection, will be determined. The presence of the construct, in all or a high percentage of the original transfected cells indicates stability. Demonstration of this stability indicates the successful creation of a HAC.

EXAMPLE 17

Production of HAC

15

This example describes the use of the neocentromere as a source of centromeric DNA in the "bottom-up" approach to produce HACs in human cell culture. Bacterial artificial chromosomes (BACs) containing cloned neocentromeric DNA and a selectable marker were co-transfected with human telomeric DNA into human HT1080 cells to yield independent HACs that were single-copy and stable in the absence of selection. The properties of these HACs, and their potential utility as a new, improved vector system for gene therapy are described.

EXPERIMENTAL PROTOCOL

25 Preparation of DNA. Highly-purified BAC DNA was prepared using Qiagen columns according to the manufacturer's instructions. Prior to transfection, BACs were linearized with SgrAI in the presence of 2.5 mM spermidine and examined by pulsed-field gel electrophoresis. Human telomeric DNA was gel-purified as a 1.6-kb BamHI/BgIII fragment from pSXneo270T2AG3 (Bianchi et al., 1997). High-molecular-weight genomic DNA was prepared from cultured cell 30 lines using standard methods (du Sart et al., 1997).

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Transfection of HT1080 cells. Transfection of human fibrosarcoma cell line HT1080 (Rasheed et al., 1974) was performed using the DOPSER liposomal transfection reagent (Boehringer-Mannheim). The day before transfection, 6-well trays (each well is 962 mm²) were seeded with 3 x 10⁵ HT1080 cells per well and grown at 37°C, 5% CO₂. Different combinations containing 5 1-2 μg of each BAC, 50 ng of telomeric DNA, 100 ng of each PAC-1, 4 and 5 (du Sart et al., 1997) and 50 ng of human genomic DNA were prepared in 50 µl of HBS (20 mM HEPES, 150 mM NaCl) supplemented with 0.075 mM spermidine and 0.030 mM spermine. These DNA cocktails were mixed with 50 µl of 0.4 µg/µl DOPSER (diluted in HBS) and left at room temperature for 15 to 20 min. The HT1080 cells were washed with PBS (phosphate buffered 10 saline) and 1 ml of serum-free DMEM (Dulbecco's modified Eagles medium) was placed in each well. The DNA-DOPSER mixture was then added dropwise with swirling and the cells were incubated for 6 h. 1 ml of DMEM and 20% v/v fetal calf serum (FCS) was then added and the cells left for 24 h at 37°C, 5% v/v CO₂. The cells were harvested and seeded into 48-well cluster trays (each well is 100 mm²) containing DMEM-10% v/v FCS supplemented with Geneticin 15 (G418, Gibco-BRL) at 250 μg/ml. The media was changed every 3 to 4 days. G418-resistant colonies normally appeared 10 to 14 days after transfection. These colonies were expanded into duplicate 6-well trays, where the cells of one tray were stored frozen in liquid N2, and the remaining cells were analysed by fluorescence in situ hybridization (FISH).

20 Cell culture and mitotic stability. HT1080 cells were grown in DMEM supplemented with 10% v/v FCS, penicillin/streptomycin, and glutamine. The mitotic stability of HAC containing clones was determined by growth in 25 cm² flasks in the presence (200-250 μg/ml) or absence of G418 selection, and grown to confluency (3-4 days) and split 1/5 and 1/10, respectively. Aliquots of each culture were harvested fortnightly and analysed by FISH (20-50 metaphases) with BAC/E8 and/or BAC/F2 probes.

FISH, ANTI-CEN/FISH and PRINS/FISH. Fluorescence in situ hybridization (FISH) analysis of HT1080 clones was performed with BAC/E8, BAC/F2, and/or α-satellite DNA probes. Hybridization using the BAC probes were performed under high stringency whereas the α-30 satellite DNA probes were used in low stringency conditions (du Sart et al., 1997). ANTI-

CEN/FISH analyses involved an initial immunofluorescence staining step using a CREST antibody or specific antibodies against CENP-B, CENP-C, or CENP-E, followed by FISH using the probes described above, essentially as previously described (du Sart *et al.*, 1997).

5 Results

HAC construction strategy. The basic strategy involved the co-transfection of the 10q25.2 neocentromere DNA with human telomeric DNA into human cells. The neocentromere region is cloned as two, circular YACs in *Saccharomyces cerevisiae*. To facilitate handling and purification of the cloned DNA in large quantities, these YACs are retrofitted into BACs and maintained episomally in *E. coli* as circular molecules. One of the BAC clones, BAC/E8, is 120 kb in size and has an insert of 105 kb that encompassed 70 kb of the 80-kb core NC-DNA region (Fig. 16). The second BAC clone, BAC/F2, has an insert size of 75 kb that overlapped BAC/E8 by 1.4 kb, and contains ~10 kb of the core NC-DNA while extending ~65 kb into the p'-side of the mardel (10) chromosome (Fig. 16). The BAC vector backbone further contains the neomycin-resistance (Neo^R) gene to allow selection in mammalian cells. BAC/E8 and BAC/F2, used either on their own, in combination with each other or with additional DNA are used in the following transfection experiments.

20 Transfection of HT1080 cells. The human cell line HT1080 (Rasheed et al., 1974) is chosen for the transfection experiments because of its near-diploid karyotype, its high level of telomerase activity (Holt et al., 1997), and its demonstrated ability to form microchromosomes containing de novo centromeres from transfected arrays of α-satellite DNA and human telomeric DNA (Harrington et al., 1997; Ikeno et al., 1998). The resulting G418-resistant clones are analyzed by FISH and classified into different categories of events.

Transfected cell lines are designated HT-38, HT-47, HT-54, HT-190, and HT-191.

Those skilled in the art will appreciate that the invention described herein is susceptible to variation and modifications other than those specifically described. It is to be understood that the invention includes all such variations and modifications. The invention also includes all of the

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steps, features, compositions and compounds referred to or indicated in this specification, individually or collectively, and any and all combinations of any two or more said steps or features.

TABLE 1

Restriction analysis of the genomic DNA of patient BE and those of his parents using three overlapping cosmids that span the marker centromere.

Y7C14	Y6C10	Y4C7
n.a.	910	910
n.a.	815, 340	n.a.
n.a.	740	740
410	410	410, 540
315, 145, 110, 80	315, 145, 110, 80	315, 145, 110, 80
n.a.	250, 148	n.a.
240, 210, 155, 120	240, 210, 155, 120	240, 210, 155, 120
222, 108, 70	222, 108	222, 200, 108, 70
180	180	180
170	170	170
168	168	168
165, 146	165, 146	165, 146
38	38	38
n.a.	35	35
n.a.	90, 40, 22	90, 40, 22
25	25, 7.2, 6.2	25
n.a.	25	n.a.
24, 19, 15	24, 22*	24, 22*
23	23	23, 19
21	21	21
9.4, 5.9, 5.1, 4.2, 3.8,	9.4, 3.8, 2.9, 2.7, 2.4,	9.4, 7.1, 4.2, 3.3, 2.9,
3.3, 2.9, 2.4	1.5, 1.1	2.7, 1.9, 1.5, 1.1
14	14, 10	10
n.a.	15, 12, 8, 6	n.a.
16, 7.5	16	16, 9
14, 7.5	7.5, 6	7.5, 6
8.6, 6.9, 6.2, 2.7, 1.8,	6.9, 6.2, 5.6, 5.2, 5, 2.7,	6.2, 5.6, 5.2, 4.3, 2.9,
1.2	1.9, 1.8, 1.7, 1.2, 0.6	1.7, 1.2
	15	15
11, 4.3, 3.9, 1.9, 1.5	11, 4, 3, 2, 1.9, 1.7, 1.5	10.2, 7.6, 3, 2, 1.9, 1.7,
		1.5
5 5 4.3, 3.6, 1.6	6.9. 3.6. 2.8. 1.6. 1.2	3.6, 2.8, 2.5, 1.6, 1.2
	n.a. n.a. n.a. 410 315, 145, 110, 80 n.a. 240, 210, 155, 120 222, 108, 70 180 170 168 165, 146 38 n.a. n.a. 24, 19, 15 23 21 9.4, 5.9, 5.1, 4.2, 3.8, 3.3, 2.9, 2.4 14 n.a. 16, 7.5 14, 7.5 8.6, 6.9, 6.2, 2.7, 1.8, 1.2 15, 8.5	n.a. 910 n.a. 815, 340 n.a. 740 410 410 315, 145, 110, 80 315, 145, 110, 80 n.a. 250, 148 240, 210, 155, 120 240, 210, 155, 120 222, 108, 70 222, 108 180 180 170 170 168 168 165, 146 165, 146 38 38 n.a. 35 n.a. 25 24, 19, 15 24, 22* 23 23 21 9.4, 5.9, 5.1, 4.2, 3.8, 9.4, 3.8, 2.9, 2.7, 2.4, 3.3, 2.9, 2.4 1.5, 1.1 14 14, 10 15, 12, 8, 6 16, 7.5 16 14, 7.5 7.5, 6 8.6, 6.9, 6.2, 2.7, 1.8, 6.9, 6.2, 5.6, 5.2, 5, 2.7, 1.2 1.9, 1.8, 1.7, 1.2, 0.6 15, 8.5 15 11, 4.3, 3.9, 1.9, 1.5 11, 4, 3, 2, 1.9, 1.7, 1.5

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MspI	3.9, 3.0, 2.8, 2.5, 2, 1.6,	3.9, 3.6, 2.8, 2.5, 2.2,	3.6, 3.2, 2.8, 2.5, 2.2,
	1.2	1.6, 1.5, 1.3, 1.2, 0.9	1.6, 1.5, 1.2, 1
SspI	n.a.	10	n.a.
XhoII	7.5	n.a.	n.a.
DraI	7.5	7.5	7.5
BglII	8.5, 6, 5, 4.7, 3.5, 2.5	6, 5, 4.7, 2.5, 1.6, 1.5, 1	7, 6, 5, 4.7, 2.5, 1.6,
			1.5, 1.1, 1
AvaII	7.4, 3.7, 3.4, 2.8, 2.6,	3.7, 2.8, 2.6, 1.8, 1.7,	4.3, 3.7, 2.8, 2.6, 1.8,
	1.8, 1.7, 1.4, 1.2, 1.1	1.4, 1.2, 1.1, 0.9, 0.8,	1.7, 1.4, 1.2
		0.5	
StuI	12.5, 8, 7.5	12.5, 9, 8.5	9, 8.5
HindIII	6.6, 5.4, 4.7, 4.4, 2.9,	5, 4.7, 4.4, 4.1, 2.9, 2.5,	5, 4.7, 4.1, 3.1, 2.5, 2.3,
	2.5	0.7	1.9

n.a.= data not available. The values represent restriction fragment lengths in kilobases. Multiple values for an enzyme denote different bands detected by a cosmid probe on a gel lane. Since there were no detectable differences between the DNA of patient BE and those of his parents in any of the fragments (except for a BamHI polymorphic band found in one of the parents, indicated by an asterisk), only one set of values is shown for all three genomic DNA.

TABLE 2

Table 2. Vectors for cloning centromeric regions from normal chromosome 10 or mardel (10) DNA into yeast artificial chromosomes (YACs). These YACs can be shuttled into mammalian cells to test for function as HACs.

Vector:	Key Feature(s)	Map	
pJS97ARTi	hTEL/I-SceI/yTEL, DHFR	Fig.8A	
pJS98ANTi	hTEL/I-SceI/yTEL, neo	Fig.8B	
Fragmentation 1	hTEL/I-SceI/yTEL, hyg	Fig.8C	
Fragmentation 2 (-/+ hGH)	hTEL/I-SceI/yTEL, neo, hGH	Fig.8D	
pVC39-AAH2	ALU-ALU TAR vector	Fig.8E	
pTEL/CAT/TEL	hTEL/I-SceI/hTEL/neo	Fig.8F	
pAAH/TCNa	TAR vector with hTEL/I-SceI/hTEL/neo	Fig.8G	
pVC39-ALU/C3-F2(+/-)	ALU-specifc TAR vectors	Fig.8H	
pTCS	ends of PAC4 in pBS	Fig.8I	
pTCN-TCS	specific TAR vector hTEL/I-SceI/hTEL/neo	Fig.8J	

TABLE 3

PCR analysis of YAC 5f-52-E8 clone and comparison with the HC-contig/neocentromere region from normal chromosome 10 and mar del (10)

Primer-Pairs *	Genomic DNA used in PCR (product size in kb)				
	BE2C1-18-1f ^b	BE2C1-18-5f ^b	YAC 5f-52-E8		
norm: 141 + 55	1.80	1.80	not present		
norm: 32 + 30	0.90	0.90	0.90		
norm: 28 + 29	1.00	1.00	1.00		
norm: 1 + 3	2.90	2.90	2.90		
norm: 39 + 52	1.20	1.20	1.20		
norm: 5 + 7	0.23	0.23	0.23		
norm: 16 + 5	3.50	3.50	3.50		
norm: 9+ 14	0.90	0.90	0.90		
norm: 36 + 37	2.00	2.00	2.00		
norm: 168 + 71	4.00	4.00	4.00		
norm: 27 + 10	15.90	15.90	15.90		
norm: 18 + 17 (VNTR) ^c	1.20	1.40	1.40		
norm: 68 + 17	8.00	8.00	8.00		
norm: 34 + 47	3.00	3.00	3.00		
PAC4t7: a + b	0.30	0.30	not present		
AFM259xg5: ca + gt °	0.21	0.19	not present		

*Refer to Fig. 1a for the relative positions of each primer-pair.

^bBE2C1-18-1f and BE2C1-18-5f are somatic hybrid cell lines containing the normal human chromosome 10 and mar del (10), respectively (2).

^c The 'norm: 18 + 17' and 'AFM259xg5: ca and gt' primer sets allow distinction between the normal human chromosome 10 and mar del (10) by detecting a VNTR and a microsatellite, tespectively.

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SEQUENCE LISTING

(1) GENERAL INFORMATION:

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 - (B) COMPUTER: IBM PC compatible
 - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 - (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
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(2)	INFO	RMATION FOR SEQ ID NO:1:	
	(i)	SEQUENCE CHARACTERISTICS:	
		(A) LENGTH: 19 base pairs	
		(B) TYPE: nucleic acid	
		(C) STRANDEDNESS: single	
		(D) TOPOLOGY: linear	
	(ii)	MOLECULE TYPE: DNA	
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:1:	
GGA'	TACA	GG (C/T)(A/G)TGAGCCA	19
(2)	INFO	RMATION FOR SEQ ID NO:2:	
	(i)	SEQUENCE CHARACTERISTICS:	
		(A) LENGTH: 19 base pairs	
		(B) TYPE: nucleic acid	
		(C) STRANDEDNESS: single	
		(D) TOPOLOGY: linear	
	(ii)	MOLECULE TYPE: DNA	•
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:2:	
(A/	G) CCA	(C/T)TGCAC TGCAGCCTG	19

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(2) INFORMATION FOR SEQ ID NO:3a:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 40917 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3a:

GAATTCTCCT	GCCTCAGCCT	CCCAAGTAGC	TGAGGTTACA	GGTGCCAGCC	ACCACGTCCA	60
GCTAATTTTT	GTATTTTAGT	AGAGACGGGG	TTTCACCGTG	TTTGCCAGGC	TGGTATCAAA	120
CTCCTGACCT	CAAGTGATCT	GCCTGCCTCA	GCCTCCCAAA	ATGCTAGGAT	TACAGGTGTG	180
AGTCACCGCA	CCCAGCCCTT	CTTTCAGTTC	TATCACCTCT	TTTTGCTATA	TTTGTATGAG	240
AGCTTTATTA	TTAGGGGCAC	АТАСАТТТАА	AATTGTTATG	TCTTATTGAT	AGATTGATCT	300
GTCATTATGA	ATGTCTGTAT	TCATTCCCTG	ATAGTATTTC	ТТТТТСТААА	TATTTTTCTG	360
AATGTGTCTG	СТАТТААСАТ	AGCCACTCTG	GCTTTTTAAA	ATTAGTATTT	TTATGGTATA	420
ТАТТТТТССТ	TTTTTTTT	TTTAAGTTTT	AGATGTTATG	TTTCCTTATA	CTTAAAGTGG	480
GTGTCTTATA	GGCAGCATAT	ATCTGGGTCT	TGATGTATTA	TTTAATCTGA	TAATCTCAAC	540
CTTTTTGTTG	GAGTGTTTAG	GCCATTTACA	TTTAGTGTAA	TTATAGACAT	GGTTTGATTT	600
GCTATACCAT	CTTTTCATTT	GTTTTATATG	TGAGCCATCT	TTTCATTGTT	CTTTTTTCAT	660
CTTTGACCAT	TTTCTTTAGT	ACTGAATACT	TTTTTTGTAT	TTCATTATAT	CTATTGGCTT	720
TTTAGTTATA	CCTCTTAAAA	TTTTTTTTC	TGTTTTATGT	AGGATTTATA	АТАТАСАТСТ	780
TTAACTTATC	ACAGATTACC	TTCAAATAGT	ATTTTACCAG	CTCAAGTGTA	ATGTAGAAAC	840
CTTACAAGAG	ТАТАТТТСА	TTTCTGTCTC	CTAATTTTTA	TGCTATGTCT	АТААТАСАТТ	900
AGGTTTGTTG	TTGTTTGTTT	ТТАССТТАТТ	GCTGTTGGCT	GGGGTCAGCA	AACATTTTCT	960

- 60 -

GTAAAGGGCT AGATAGTACA GGCATACCTT GGAGATACTG TGGGTTTGGT TCCATACCAC 1020 CACAATAATA CAAATATGCA AGAAGTGGAT ATCACAATAA AGTGAGTCAC ACAAGTCTTT 1080 TGGCTTCCCA GTGCATATAA AAGTTTTGCT TATACTACAC TGTAGTCTGT TAAGTGTGCA 1140 ATAGTGTTAT GTCTAAAAAA ACACATACCT TAATTTTAAA ATGCTTTATT ACTAAAAAAT 1200 GCTAACAATC ATTTGAGCAT TCAGTGAGTT GTAATCTTTT TGCTGGTGGA AGGTCTTTTC 1260 TTATTGATGA CTGATCGGGG GTCAGGTGCT GAAGCTTAGG GTGGCTGTGG CAGTTTCTTA 1320 AAACAACAGT GAAGATTGCA ATATCAGTTG ACTCTTCCTT TCATGAAAGA TTTCTCTCTA 1380 GTGTGTGATG CTTTTTGATA GCATTTTATG CACAGTAGAA CTTCTTTGAA AATTGGATCA 1440 ATCCTCTCAA ACCCTGCTCT GCTTTAACAA CCTAAGTTAA TATAATATTC TGAATCCATT 1500 GTTGTCATTT CAACAATTTT CACAGTGTCT TCACCAGGAG TAGATTCCAT CTCATTTCCT 1560 GAGATGGAAT CTTTGCTCAT CCATAAGAAG AAATTCCTCA TCTGTTCAAG TTTTATCATG 1620 AGATTGCAGC AATACAGTCA TGTCTTCAGG CCTCACTTCA CTTTTAATTC CAGTTCTCTT 1680 GCTGTTTCTA CCACATCTGT GGTTCCTTCC TCCATTGAAG TCTTGAACCT CTCCAAGTCA 1740 TCCATGAGGG TTGGAATCGA CTTCTTCCAA ATTCCTGTTA ATATTTATAT TTTGACCTCC 1800 CATGAATCAT GAATGTTCTT AATGGCACCT GGAATGGTGA ATCCTTTCCA AAAGGTTTTC 1860 AATTTACTTA GTCCAGATCC ATCCATCCAG AGGATCCACT TTCAATGCCA GTTATAGCCT 1920 TATGGAATGT ATTTCTTCAA TAATAAGGCT TGAAAGTTGA AATTACTCCT TGATCCATTT 1980 TCTGCAAAAT AGATGTTGTG TTAGCAGGCA TGAAAGCAAC ATTAATCTTT TTGTACATGT 2040 CCATCAGAGC TCTTGGGTGA CCAGGTATAT TGCCAGTGAG CAGTAATACT TTGAAAGGAA 2100 TTATTTTTCT TAGCAGTAGG TCTCAACAAT GGGCTTAAAA TATTTGGTCC ACCATTCTGT 2160 AAACTGATGT GCTGTCATCT AAACTTTGTA GTTTCATTTA TAGAGCACAG GCAGAGTAGA 2220 TGTAGCATAA TTCTTAAGGG ACTTAGGATT TTCAGAATGG TAAATGAACA TTGGCATCAA 2280 TTTAAATCAC TAGCTGTATT AGCCCCCAAC AAGAGAGTCA GCCTATTTTT TGAAGCTTTG 2340

WO 98/51790

AAGCCAAGCG TCGACTTCTC CTCCCTGGTT ACAAAAGTCC TAAATGGCAT CTTCTTCCAA 2400 TATAAGGCTG TTTTATCTAC ATTGAAAATC TGTTGTTTAG TGTAGCCACC TTCATCAATG 2460 ATACTATCTA GATCTCTTGG ATAACTTGTG CAGCTTCTAC ATCAGCATTT GCTACTTCAC 2520 CTTGTACTCT TATGTAATGG AGTGGCATCT TTCCTCGTAC CTCATGAACC AACCTCTGCT 2580 AGCTTCCAAC TTTTCTTCTG TAGTTTCCTC GCCTCTCTCA GCCTTCATAG ACTTGAGGAT 2640 AGTTAGAGAC TTGCTTTGGA TTAGATTTTG GCTTCAGGAA ATGTTGTGGC TGGTTTGATC 2700 TTCTATCCAG ACCACTAAAA CTTTATCCAT ATCAGCAATA AGGCTGTTTT GCTTTCTTAT 2760 TATTTGTGTG TTCACTGGAG TAGCACTTTT AATTTGCTTC AAGATATATT TCTTTGCATT 2820 CACAACTTGG CTGACTGGTG CAAGAGGCCT AGCTTTCAGA CTATCTTGGC TTTTGACATG 2880 CCTTCCTCAC TAAGCTTAAT CATTTCTAGC TTTTGATTTA AAATGAGAGA TGTAGGCCAG 2940 GCACAGTGGC AGGCACAGTG GCATATGCCT GTAATTCCAA CACATTAAGA GGCCAAGGTG 3000 GGAGGATTGC TTGAACCCAG GAGGTGGAGG TTGTAGAGAT CACACCACTG CATTCCGTCC 3060 TGGATGACAG AGCAAGACCT TTCTCAAAAT AAAATGAGAG GTGTGCTTCT TCTTTTGTT 3120 TGAGCCCATA GAAGCCATAG TATGATTTTT AATTGGCCTA ATTTCAATAC TGTTGTGTCT 3180 CAGAGAATAG GGAGGTCTGA AGAGAGGGAG AGAGGTGGGG GAATGGCTGG TCAGTGGAGC 3240 AGTCAGAACA CACATAACAC TAATAAATTG TTTGCTGTCT TATATGGATG TGGTTTGTGA 3300 TGCCCCCAAA CAATTACAAT AGTTACAGCA AATATCACTG ATCACAGATC ACCATAACAG 3360 ATATAAGAAT CATGGCAAAG TTTGAAATAT TCTTGAGAAT TAGCAAAGTG TGACACAGAG 3420 AAACAAAGTG AGCACATGCC GTTGGAAAAA ATTGGTGTTG ATAGACTTGC TCCATCGCAA 3480 GTTTGCCATA CGCCTTCAAT TTATAAAAAA CACAATATCT AGGAAGTTCA ATAAAGTGAA 3540 GTGCAATAAG ATGAAGTATG CCTGTAAATA TTTCAGGCTT TCCAGACCAT AGGGTTTCTG 3600 TTGCAACTGC TCACCTCTGC CATTATAGCA TGAAAGCAGC TATAGAAAAT ATACATAAAT 3660 GAGGCCTGTA ATCCCAACAC TTTGGGAGCC CAAGGTGGAT GGATCACTTG AGGTCAGGAA 3720

TTCGAGACCA GCTTGGCCAA CATGGCAAAA CCCCGTCTCT ACTAAAAATA CAAAAATGAG 3780 CCAGGACTAC GCATGCCTGT AGTCCCAGCT ACTTGGGAGG CTGAGGCAGG AGAATCTCTT 3840 GAACCCGGGA AGGGGAGGTT ACAGTGAGCC AAGATTGTGC CACTGCACTC CAGCCTGGGC 3900 AACAGAGTGA GACTGTCTCA CAAAAAAAAA AAAAGGAAAA GAAAATACAC ATAAATGAAT 3960 GTATGTGGCT GTGTACCAGT ATATCCTCAT GCTCTAGCTT GCCAACCCTT GCTTTACACT 4020 GTCAGTTACC TTCTAAAGAG ATTAAAAATC ATAACAATAT CTATTACGTT TATTCACATC 4080 CTAGTGTCAT TTCTTCCTTA TGTAGAATCA AATTTCATTC TGGTATCATA TTTCTTCTTT 4140 CTAAATAATT TCCTTTAATA TTTTTTATAG CACAGGTCTA ATAGCAATGC ATTATGCAAT 4200 TCATTGCTAT TAGACCTGTG CTATAAAATA GCAATGAATT ATGTCAGTTT TTATTTGTCT 4260 GAAAAAGTTT TTTGTTTTTG AAATATACTT TTGCTGGGTA TATAAATCCA TGTTGCATAA 4320 CTTCTCTTTT CTTCAGCACT TTAATGAAGT CACTCAGTTA TCTTCTGGCT TGTATAGTTT 4380 CTCTGGCTGC CTTCAAGATT TTTTCATTGT CTTTAATTTT TAGCAGTTTG ATGTGTCTAG 4440 GAGTGATTTT CTTTGTATTT ATCCTTTTGG GGGCCTCTTA ATTTCTTTGA TCCTTTTTTT 4500 CTTTTTTTT TTTTTTAAT CAGTTTTGGT CTGTCTCCTC AAGTGGGCTG AAAAAAAAA 4560 AAAAATAAAA TCATAGTTTA AAAAACTAAT TTTGGAAAAT TTTCAGCTAT CATTTCTTCA 4620 AATATTTATC CTACTCTATG CTCCCCTCCT CCCCTTTCCT TCTGTGACTC AAATTACAGG 4680 TATATTTAAC CATTTTATTT GTTCACGGCA CTTGGATGCT CTGCTTTCTT ATTTTTTGTC 4740 TTTCATTTTG GATAATTTCT ACTGACCTAT CTTCAAGTTC ACTGATTCTT TTCTCAGTCA 4800 TATCTAGTGT GCTCAACGCC TGTTGAAGAA ATCCTTTGTC TTTAATATCA TGTTTTTTAT 4860 TTCTAGCATT TTCATGTAAC TCTTTGTTCT GGTTTCCATC TCTCTACTCA CTTTTTTTTT 4920 TTTTTTTTT TTTTTTGAG ACAGAGTCTC GCTCTGTCAC CCAGGCTGGA GTGTAGTGGC 4980 GCGATCTCGG CTCACTGCAA CTTCCGTCCC CTGGGTTCAA GTGATTCTCC TGCCTCATCC 5040 TCCCGAGTAG TTGGAATTAC AGGTGCCCAC CACCGTGGCT GGCTAATTTT TGTATTTTTT 5100

TAGTGGAAAC	AGGGTTTCAC	CATGTTGGCC	AGGCTGGTCT	TGAATTCCTG	ACCTCAGGTG	5160
ATCCACCTGC	CTCAGCCTCC	CCAATTGCTG	AAATTACTGG	CATGAGGCAC	TGCACCCAGC	5220
TCTGCTGACA	ТТТТТТАТСТ	TTTGCTGCAT	TTTGTCTACC	TTTTCCATGA	AATCCTTTAA	5280
CATAGTAGTC	ATAGTTACTT	TCAATTCCTT	GTCTGACAGT	TCTGACATTC	AAGTCTAGGT	5340
CTGTTAATAG	CTTTGTGAGT	CTGTTAACAG	CTTTTTTCA	ТТСТТСТСТС	TGTGTTTTGT	5400
ATTTCTTGAT	TGTATGCCAA	ATATTGCCTG	ТААААТАААС	TTAGATAAGT	CATACTTCTA	5460
TCCAGAAATA	GGCACATTTT	TTGTGTCCAG	TCATTAGTGT	GGAGGGAGGT	TGGGGCAGTC	5520
TAGTCAGTGG	CTGAACTAGG	TTTGGATTTG	TTGATGCTAT	ACTTAGAATG	CACCAGACTT	5580
CCATTCACTG	CAAGAGTGGG	CTGCTGCGCT	TTGTGATTCA	TGTGAGGCCT	GAATTGTGGG	5640
TTTTTCCTTA	GTGTGTCCCT	CCATGCTCAG	ATTTCAGCAA	GTCTTCATAT	CTGTGCCACA	5700
GAAGGAATCT	GACCCATGCT	CTTTTTGACC	TCCCCAAGTG	ATCAACTGTT	GCTTGTTATA	5760
GCTTGTCATG	GAGTAAGAGG	GTGTTTTTT	AGTTTTCATC	CTCCAGCCTT	GGTCTTGGGC	5820
CCTGAGCTCC	TAGACTCCAG	GAGTGGATGG	AATCCAGTGA	TTTCTCAGTA	ATTCAGCCCC	5880
TTCTCCAGTA	GTGGCAGATC	TCTGCTTTGT	ATCAGTGCAA	GATCCTGGGC	TGAGCTCATT	5940
TTCTGCCCTT	CCTCGAGTGG	CAGACAGCTC	TTGCTTTCAC	CCTTCTACCA	AAGGCAGTGC	6000
ATCTTTTCTT	GGGCCTCTCC	CCATTGAACT	TATGACTTTC	ACATAAGAGA	AGGGCTCATG	6060
TATCAGAGAA	TTCTGTGACT	TTGTGCCACA	TACAGAGTCT	CTCAGTTCTC	TTGCCCTGCC	6120
CCAGTCTTTT	TTGTGAGCAC	CTAGTAGAGA	CCCTTGGAGA	AGAGCAAGGA	AGCGAGTATG	6180
GACTTCTTTT	GTGTCTGTCG	ATTGCTTTGT	TTCTCAACTG	CTACTCTTGG	ACTTTAAGAA	6240
ТТСАТТАААА	TTTCAGCTGT	TTTCTTTTAT	TCTTTTTGTT	TTTCTTTTTT	TTTTTTTTTT	6300
TTTTTAGATG	GAGTCTTGCT	CTGTTGCCCA	GGCTGGAGTG	CAGTGGTGTG	ATCTTGGCTT	6360
GCTGCAACCT	CCGCCTCCCG	GGTTCAAGCG	ATTCTCCTGC	CTCAGCCTCC	CAAGTAGTTG	6420
GGATTACAGG	TGCCCACCAC	CACACCTGGC	TAATTTTTGT	ATTTTTAGTA	GACACAGGGT	6480
		CT TO CC	eran een Criii)aa	(D1- 26)		

TTCACCATTT TGGTCAGGCT TGTCTCAAAC TCCTGACCTC ATGATCTGCC CGCCTCAGCC 6540 TCCCAAAGTG CTGGGATTAC AGGCATGAGC CACCGCGCCA GGCCTCAGCT GTTCTCTTTT 6600 TACCTGCTGG GATGGCTAGT TTTCTGTGTC AACTTGACTG GGCCATGGGA TGTCCAGATA 6660 TGTAATTAAA CAGTATTTCT GGGTGTTTCT GTGAGGGTGT CTTCAGAAGA GATTTGCATT 6720 TGAATTGGTG AACTAAGTAA AGCAGAGGGC CCTGTCTAGT AGGGGTAGGC ATCATCCAGT 6780 CTGTTGAGGA CTTGAATAGA ACAAAAGGCA GGGGAAGGTT GGAATTGCCC CCTCTCTGCT 6840 TGAGCTGAGA CATCTATCCT GCCCTTGGCA CTCCTGGTTC TCAGGGGTTC AGACCTGGAT 6900 TCCTGGTCTC CACCTTGCCC ATGGCAGACT GTGGGACTTC TCAGCCTCCT ATCTAATTAA 6960 7020 CCCTATGTAT CCTTCTGTTT CTCTGCAGAA CCATATCTAA TACACCTGCT TTTATGACGA 7080 TTACCTATCG ATTCTGTATT CTGCCAAAAC TGAAAACAGT TCATTTTTCC ATCTCTTCTC 7140 AGAGAGGCTT GTCAGCCATT AGTTCTCTGA TGGGCTCAAG AAGTTATGCA GTTTTTTTTT 7200 TCTCACTGTT AGGATGGAAT TGATATTCTG TTGAAACTTT CTATACCTAA GTGGAAACTT 7260 GTTTTGAGGT TATTTTCTCT ACTTACTTTT GCTGGAAATG GAACACTCTG TATCTAGTTA 7320 7380 TCATCTGTCA AGGTGTTAAC TAATGGCAAA GCATTTAATA AATCAGCATT CATGTATTCA 7440 GGTGCTCTGA ATTATCTGAC TTTTAAATTC TTACTTTATA AATGAGAAAA TTGGGGCATG 7500 GATATCTTAA GTCATTAATA TTCTTTGGCT CACAGAATTG GCAGTATAAC CTAAAGGTAA 7620 TAACTAGGTG ATTTTCTTTT ATATCAATTA AATATGTCAG TTTTCAAATA TTCATAAGTA 7680 CCTACTGTGC AGGGAAAGAA CATGCCATAC AAAAGATGTA GTCCAGGCCT TTAAGAAACT 7740 TTCATTTAAT GGGAACTCAA GAAGTGTACA TATAAGGAGG GAAGTAGCAG TATGGTACAA 7800 GATAATACAT ACATATCAGT GAATGATATT GCCAAAAAGT GCTATTGATA GAGAAATAAT 7860

TCATTTCTGC AAACAGCTGC TGATCTCCTA CTGAAAACAG AGGAGGGAGA ACAGGACGCC 7920 TCGTGGTCAG GATAGAAGAG AAAGACCTTG AGTTGAGCCT TGAACAGTAT TTAATATTCA 7980 AAAGGTTAAG AGAGGAGAGC AATTGAGGAG GGGAGAATAG TTCCAGCACA AATGATGGTG 8040 TACAAGATGA ACACAGTCAG TAAAGAGCAG ACTGGTCTGG ATGGAGAGGA GGATTTGCAT 8100 CATTTGGGAT TACGTCATTT AGACCCTTGA AAGCCAGGAT TGAGTAAAGC CACAGTGAAG 8160 CGACTGGCTC GTATGGAAGC TTTATTTTAA GAAGATTAAT CTGGTAGTGA CATGTGCCAA 8220 AAACTGAATA GGTAGAAATG AGATGCAGAG AGCCCAGTTA GAACTAAGTC TGGTGCAGTA 8280 ATGCAGGATT GAGGCAATAA ACACCAAACT ACAGTATCAC CAGATAATGG ATGTTTGAAC 8340 GGACGGTTTA AAGGAAAATT GATGGTATTT GGTAATTTAT TAGATAATCC AGGGCCATGG 8400 AATGAGAGGG GAAAATGACT AACCATAGTC ATCAAATGGT TTTTCTTAAT GAATCTGAAT 8460 TTTGGTGTAA GAGCAACATT TTCTTAGGCC TTGCCTAGTT GGTACAGCTG ACTATGATAA 8520 TGACTGCTAC CATGCTTGTT CCTCTTTTAG CAGCTGTGAG TCCCCCACCA GCCAAACAAT 8580 GAGCCTCTTG AAAAGGACGA TGCCTTTTCA CTTCTCCCA AGTGCTTGGC AAATAGGAGG 8640 CCTTTTGAAG TTACTTTATA GTTAGGGGTT CCCAGTGAGT ATTTGAAATA TTAAGTCATG 8700 CCCGTGGTTG ACAGCATGGC CCTACTGCTC ATCATCAGCT ATTAACCTTA GGCAAGTTAA 8760 TGAACTTTTC TAAGCCCCAG TCTACTCATT TATAAAGTGG GATTATTAAT AATGTCTACT 8820 TCATAAAATT ATGAAGCCTG AGTTAGGTCA TTCAGATAGT GTTTAGTCTG ATTCTTCGAA 8880 CCTAGTAAAC AGTCAGTAAA CAGAAGCAAA TGCCACATGC CTGATTTATA TCCAAGGGGA 8940 GAAAGGTAAA AGTGAAATTT TCATGATTTA TGGATTCAAA TTATACATTT CAAAGATGCT 9000 TTATAAGCTA TTGTTTTGGT AAGAAGAATT GAGCTGAAAC AGAATTTTCT GACAGCAGTG 9060 ATTATTAAAT GGTGAAATAG GCTATTGATG TCTTTAGAGG ATATAGATGT TCACCTTTTG 9120 CATATAAGTG CACAAAAATT CACTAAGTAG ATATGTCTGT CTACACAGAG AGAGAGAGCG 9180 TGAGAGCATT AAAGTTAGTA AACATCCCCC TCGCTTTTTT TTTTTTGAGA CAGGGTCTTA 9240

CTCTGTTGCC	TAGGCTGGAG	TGCAGTGGTG	CAATCGTGGC	TCACTGCAGT	CTCAACATCC	9300
TGGGCTCAAG	CGATCCTCTC	GCTCAGCCTC	CTGAGTAGCT	GAGGTGTGCA	CCACCACACC	9360
CGGCTAATTT	ТТАДАТТТТТ	TTATTGTAAA	GGTGAGGTTT	CACCATGTTG	CCCAGGTCTC	9420
AAACTCCTGA	GCTCAAGCAA	TCTGCTCACT	TCAGCCTCCA	AAAATGCTGG	GATTACAGGC	9480
GTGAGCCACC	ACGCCTGGCC	AGTAAACCCC	ATTCATTTAC	ATCATCTTAC	TTGTCCCTCC	9540
AAAATCCTGC	AAAGTAGGTA	GGTTCTGTCT	TTATTTGTTA	TTTAGGTGAA	GAACTTGAAG	9600
TGGTGTTGAG	GAATAGGTGT	TTTGCCAAGA	GTCACGCAGC	TGGAGTGGCA	GAGCTGTATA	9660
CTCTTCTGAT	TCCACCAACG	CTGTTTACAT	CACATCTGGA	GAAAAGTGCT	CTGAGGCACA	9720
GATGTTTAGT	GGGAGGGATG	AGACACAGGC	TGCAATGCCT	AAAGATAATC	GGGAATAAAA	9780
GCAGAAAACA	AGACGTTTGT	TTCTGTTAAA	ATGAGACAGA	AAATAAGGCG	TTTGTTGTTT	9840
GGGATTGAGC	ACTTGGAGAA	GTGGGGAGCG	ATTTGATTTG	GGTGAGACTG	CTCCTGGAAT	9900
GCTGCATCTG	GTTCTGGACT	ACTCATTACT	AGGCTTATAG	AAACTAGCTG	GAGGAGGTTC	9960
AAAGAAAAGC	TCCAAAATGA	TTAGCGGGCT	GACGGGATTG	ATTTATAAGA	AAAATTAAAA	10020
GAATTAAATG	TGTATAGCTC	AGCTAAGCAA	AGATGAAAGA	GACCAGCTAA	ATGTATACAA	10080
ATATCTGAAA	CGTGCAAACT	TTAAAAAGAG	AGATTAATTA	TTTAACATGA	TACACGGGGG	10140
CACAATATGC	AGTCACAGGA	TGAAAATTTC	AGCTGAGTAT	CTAGAAGAAT	TCCCCGATAG	10200
TGAATCTGTT	AAGGCTGTCT	GTAGTGTGGC	CTTTCCCTGG	AGAGGCAATA	GAAATTTCAA	10260
GTCTTACGAT	TTTAAAAGTT	TCTTGGGAAC	TAGGTATTAG	ATGATGTTAG	AGAATTATTA	10320
TTAATTTGGT	CAGGTATGAT	AATGGTATTG	TAGTTCTATA	AGAAAAATTG	TATTTTTAG	10380
AGTTACATAC	CCTGAAATAT	AAGCATAGAA	TATGATGTAG	GAGATTTGCT	тталалтасс	10440
ACAGTAAGGA	AAGAAAGGAA	GGAGGAAGAA	AAGAAAGGAA	GGGGAAGAAA	GGGAAAAAGA	10500
GGCAAAGAAG	GAAGAGAAGG	TAAGAGAAAG	AAAAAGAATG	AAGGAAGAAG	GCTGGGCACT	10560
GTGGCTCATG	CCTATAATCC	CAGCATTTAG	GAGGCCAAGT	TGGGAGGATC	ACTTAATTAA	10620

GCCCAGGAGT	TCAAGGCTGC	AGTGAGCTGT	GATTGCGCCA	CTGCACTCCA	GCCTGGGTGG	10680
CAGAGTGAAG	CCCTGTCTCT	ААААААААА	AATAAGTTAA	AAAGAAAGAA	AAGGATAGAT	10740
GAAGTATGGC	AAGATGTTGG	TAATGTTGAA	CCTGAAGGAA	GTTAATATGT	GAGTTCACTT	10800
TCCTCTTCAG	TCTTCTTTAT	GTATGTTTGC	CAACTTTCAT	ААТАААСААТ	ТТАААТТАТА	10860
TTTTCCTGAT	CAAAACTTAG	TAGCAGTATT	AATCCCTGGG	CTTCCTGACT	AGAACAGCCT	10920
CATTACCACA	TGGGCAGAGT	TCTGGCCGAC	CAGGGACCAC	GTAGTGGTTC	ACCATCTTGC	10980
TCTGGTAATG	TGGTCTGGGC	TGAAGGCCC	TTTCTAAGGT	TGTAGATAGA	AATCCAGGAA	11040
ACTTGTTAGA	ACTGCAGACC	TATCAGGGTA	CCTGCAGGAG	GTGAGTCTAC	TAAGGTGAAA	11100
AAGCAGAGGG	CAGAGGTCGT	GATTAGCAGC	TGACCGCCCC	CTGCTTTTCT	GTCCCTCATT	11160
CGTGGAAAAT	TGAGTGGAGC	TCAATTTTGA	GTGGAGCTCT	AAGTAGCTCC	ACTTGTAGAC	11220
ATTGAGTGGA	GCTCTAAGTG	TCTTCAGAAT	AGCAAAACAC	TAGTTTTCTT	TTTCTTTTCT	11280
TTTTTTTTT	TTTTGGAGAC	AGAGTCTTGG	TCTGTCGCCC	AGGCTGGAGT	GCAATGGCAC	11340
GATCTCCGCT	CACTGAACTC	TGCCTCCCGG	GTTCAAGCGA	CTCTCCTGCC	TCAGCCTCCC	11400
GAGTAGCTGG	GATTACAGGT	GCCCACCACC	ACGCCCAGCT	AATTTTCCTA	TTTTTAGTAG	11460
AGATGAGGTT	TCACCGTGTT	GGCCAGGCTG	GTCTCAAACT	CCTGGCCTCA	AGTGATCCGC	11520
CTGCCTTGGC	CTCCCAAAGT	CCTGGGATTA	CAGGTGTGAG	CCACCACACC	CAGCTGCAAA	11580
ACCCTATTTT	TCTTGAATGG	AGAAACACTT	TCCCCTTATT	TATTGAGTTT	GGGAAGCAAG	11640
AAGAGGGGTA	ATTCATTAAG	TGAAAATTTC	CAAAATCCAG	AAAACATCGA	TAAAGCAGCA	11700
GCTTAATTTT	TTTAAGGAAG	AATTTTTTAA	ACTATCTTCT	TTTGAGCCTC	TTTAGGAAGA	11760
CCTCACGTCC	TTGCCTTGAA	TGTTGAGAGT	GGGAAATCCA	GGGAGTTTTG	GAATGCATGC	11820
CTTATGTCTG	CTTTTTTGTT	TGTTAGAGAA	АТАТАААТАТ	TTTATCTAGG	TTTTGCTGAT	11880
GGCAGTCAAG	CATGAACACA	ACCCACTGTT	TGAGAAGCTG	TAATTTCTGA	ATTTCTGCAG	11940
AGTGCACATC	TAGGCCAGCA	AATGGCAGTA	AGAGTGAGGT	GGATTTAGCT	CAGTGTAAGG	12000
		CHIDCT	THE CHEET	(Rule 26)		

ATGAACTCCA	GAACCATCGG	CTCTGACTGA	AAGTGAAGCG	GCAGCCGCGT	TGTGGGAAAG	12060
CTGGCTGGAG	TCTCTCTCAT	AAGCAGGCAT	TCTTTTTCTC	CAGCCCGTCA	CTGTGTTGGT	12120
TTGGGCCCAC	GGTAAGCCTC	CTGGCCTCTA	GGCTGTAACC	CCCACCATCC	TCCTCTGCCT	12180
CGCCTCCAGA	GTGATTGTTC	TGAAGCACAA	CTGGATGTCA	TTCCCCTTCC	TGAACTCCTA	12240
GCACCTACAG	GGACTCCATC	CCTTGTGCCC	CACATACCTC	ACACGTAGAC	ATTCCTAATG	12300
AAGATTTGAT	TGAATTATTG	TAAACTCAGT	GCCTCCCACT	CTTCTAGTTG	CCTCTCTGCC	12360
TGCCTTTGTA	CATTTATTTA	TTATTTATT	TATTTATTTA	TTTATGAGAC	AGAGTCTTAC	12420
TGTATCACCC	AGGCTGGAGT	TTAGTGGCAC	CATCTCAGCT	CACTGCAACT	TACCTCCCAG	12480
ATCAAGCAAT	CCTCCCACCT	CAGCCTCCCG	AGGAGCTGGG	ACCATAGGCA	CGTGCCATAT	12540
GCCCGGTTAA	TTTATTGTAA	TTTTTGTAGA	GATGGGGTTT	CATCGTGTTG	CCCAGGCTAG	12600
TCTTGAACTC	CTGGACTCAG	GCGATTCGCC	CGTCTCAGTC	TCCCAAAGTG	CTGGGATTAT	12660
AGGCGTGAGC	CACCATGCCC	AGCCGCTAGC	ACTCATCTTA	ATCGTATATT	TACTTATCTG	12720
GCTTTCCCAC	CAGACTGCGG	GCTCTTCAAG	AGTAAATGCC	ATGTTTTCAC	CTTTATTTCC	12780
CCAGTTTGTG	GCACATTCTA	GGCACTCGCC	ATCATGAAAT	AAACCTCTGG	AGCTGTGATA	12840
TTACAAACGT	GGAAAGATGA	CGAGCACTCA	GCAACTTTCA	GTGAGTAAAC	AAAGGCTTTC	12900
ATTCAGCATG	ATTTATTGAC	TGCCCAAATC	TGGGCTGCTT	CCTGTCTGTG	GTTCAAGGAG	12960
AGCATAGTCT	ACAGAACCAG	AGACCTGGCT	ACTCTGGAAG	TTAGACTTAA	GCCCACCCCG	13020
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ATGCAGTGAT	ACATGCTGGA	AATGTTTATT	CCACTACCCG	AAGCTGCCTC	TCAACTTAAC	13140
AATCCATGAA	AGAAACAAGA	TGGTATATAA	СТТТТТСТАА	TTTGTGATGC	CTTTGTTTAT	13200
TTGTTTCCGG	TTAAAAGAGG	AGGTGGCATT	GAATTGTTTG	TTTGGTTTGG	TTTCTTCTTC	13260
AATAAGAAGC	ATCTTAATAT	AACTAGACTG	GACATCTGTC	CCATTTTCAA	AAATTACAAG	13320
TTTCGATCAT	TGCTAAATTG				ATTTGCATTT	13380
		SUBS	TITUTE SHEET	(Kuie 20)		

ATAAAAGCAG AAGCAGACTA	GCAGTCTTTC	TAATGCAATC	CCCCAAATGC	ATGAAGTATT	13440
AGATTGCTTC TCCCTATTGG	TTCATGCATT	GCTAAAGGCT	TAAAAGGATC	ATTGATTTTA	13500
ATTATTTAAT GTGTACAGCA	GGCTGAGCTT	CCTTTCTTTT	TTAAGGGAAG	AACCTTCAGG	13560
GGCATTGCTT TAGTTTTTTA	ATGTTAAATC	TCATTTTTCT	TTGAAAATAA	GAAGTTAAAG	13620
CTGTATTCAC ACAAGCTCTC	AAAGTGCCAG	ATTTTCATTG	TGTTTTTAAA	CCATCTAGGA	13680
AATGTTTGAT TCTAATGAAA	CATTACTGCT	GAAAATTGGG	CTGAAATTGC	TGGGCTGGAA	13740
ATATTGTTAT AACTTCACAT	GATTCCAGTG	TTGTATTATT	ATTTTTTCTT	TTTCTTTTTT	13800
TGACCCGATA TAGATGAAGC	GAAGAGACAA	GGAGCAATCC	CATGTGTAAT	AGAAAAAGGC	13860
AGCCTGAATT GTTGTTGCTG	TTTTTGAAAT	TTAAGCTGGT	TTTCGATTAA	ATTCAGTAAA	13920
TGGTCCAGGA CTATAAATGT	TGAACATTTT	TTACCGTGTG	ATTTAAATTT	TAGTCTTATT	13980
GTTTTTTTT TTTTTGATGG	TTTACATTTT	CCCCATGGGA	AGCAGCTATG	TCATGTCGGC	14040
ATGATTCATC ATGGTAACAT	CTCGGGTTAT	TTTGGTTTGT	GTTATGTTCA	GAAAGCGGAA	14100
TGCCAAAAAT AAAGAGTGGT	TTGTGATGTC	TAGTGTGTCT	TCCTTTAACA	AATCAAAGGC	14160
TTTTATTTAA TCCACTTAAT	GGGACACTGC	AGAAATTTAA	AAAATGGAAG	TCCCATCCAC	14220
AGAAGGCAGG TACTATGATG	TAAAAAGTTT	AGGTGGGGGA	TTAATAGAGT	GATCATATAA	14280
TTTATGAGCT AAACCGGAGG	CACTTTTTT	TTTGAGATCG	AGTCTCACTG	TTGCCTAGGC	14340
TGGAGTGCAG TGACGTGATC	ACAGCTCACT	GCAACCTCCG	CCTCCCGGGT	TCAAGCGATT	14400
CTCATGCCTC AGCCTCCTGA	GTAGCTGGGA	CTATAGGCGC	CCACCACCAT	GCCCAGCTAA	14460
TTTTTGTGTT TTTTGTAGAG	ATGGGGTTTC	ACCATGTTGG	CCAGGCTTGT	CTCAAACTCC	14520
TGACCTCAGG TGATCCGCCC	ACCTCGACCT	CCTAAACTGC	TGGGATTACA	GGCGTAAGCC	14580
ACCATGCCTG GCCCAGAGAC	ACTTTTGAGA	GTGAAGAGGA	AGCTGAGAAT	AATTCACTGA	14640
TCTACAACTG GGACCATCCA	GGGCAAGCCA	GATGCCATTA	CCACTAGCTA	GAAAGCTTGC	14700
CAAGGTCTCA TTTACCTTGG	TATATAGCAA	ATTCTTCTTT	TGAATTCTGG	AAATTCTGGT	14760

AAGTCATTGA GGTAGCTCTG TGCCAAGGAG CAATATGGTA GAATTCTAAT ATTTCAGGCA 14820 GACAACACTT TCCTGCATTT GTAGCAGGTA AAGGGAGGTC AGGGCAGAAG ACAAAACCAC 14880 TGGGACTCGA CAAAGGGCAT AAACGTCTAA TGCACCTGAT GTAGCTGATG GTAAATTGTT 14940 ATCAGCTAAA GATCTTTCAT AATAAATAAA CTTATCATTT GTAGGAGGGC ACAGAAATCG 15000 TGGAAAGCTG GGATTCAGGT TGCCTGTGGC TTTAATTCTG GAATCAGAAA TATTAGTCAA 15060 GGATATCAGT CTATGAAGTA AGTTTTCAAT GTTATATGCC ACAAGATGCA GCTGTCCTAT 15120 TTTCACTTCC AGTAATTCCT TCTGAATTAA TACACCTTAA AAATAGCTGC AGCTTCTCAA 15180 ATCTGTGAGA ATCGTATGTG CTGCTTGCTA CACTTTCTTT TTCCTGAAGG CTCTTTGAGG 15240 TCTTTCAAGA ACTCAATTCA ATTCAGCAAC AATTAGGGGG TCTAAGGTAT ACAGACGCTG 15300 TGCAAGATGC TCCTGAGACA CAAAGAGGAG GTCAAGCCCC TGCCTTCAGG CACCTCTCTA 15360 TAATATAGGA GGAGAAAGAG AAGAAACACT AATACACATA GGTAGGTGCC ATTAAAAGGG 15420 TACATACATT AAAGCCAGGT GGTAGGTGTA AGAAGATTTG TAACATGAGA ATTTTCTGCA 15480 TGTTTGAAAT ATCTTATAAT TTTTAAAAAT TAAAATGGGA GATACATATA TATGTATTTA 15540 TGTATGTATA TATGTATGTA CATATACACA CATATATACA TAAATATATA CATAAATATG 15600 TATATATGTG TATATAGACA TAAATATGTA TATATGTGTA TATATACATA AATATGTATA 15660 TATGTGTATA TAGACATAAA TATGTATATA TGTGTATATA GACATAAATA TGTATATATG 15720 TGTATATAGA CATAAATATG TATATATGTG TATATAGACA TAAATATGTA TATATGTGTA 15780 TATAGACATA AATATGTATA TATGTGTATA TAGACATAAA TATGTATATA TGTGTATATA 15840 GACATAAATA TGTATATATG TGTATATAGA CATAAATATG TATATATGTG TATATAGACA 15900 TAAATATGTA TATATGTGTA TATAGACATA AATATGTATA TATGTGTATA TAGACATAAA 15960 TATGTATATA TGTGTATATA GACATAAATA TGTATATATG TGTATATAGA CATAAATATG 16020 TATATATGTT GTATATAGAC ATAAATATGT ATATATGTGT GTATATAATA ATGTGTGTCA 16080 TATACACACA TATATACATA CATAAACATT CTGCATTATA CCATTCACTT TGTAACCCAT 16140

CTTCCCTAAA	AACTGTCTCA	TAAAGAGTCT	TCTTTTCCCT	GTACCTATGC	AATGGTAAGT	16200
AGCAAAACAC	ACATTCTTTT	GGGTCCCCAT	AACATTCCCT	GTAGTTTGCC	CTTAACAGTC	16260
TTTGATGTGA	AATTTACTGT	TTCTGTCTTA	ACCTTGCCTG	TCTCGCGTAC	ATGGAGTTTT	16320
GGCTCCTGGC	TCCTAGTCTG	CATCTTCACC	CCATCCCTTG	CCCAAAGAAT	CTGGTTATGT	16380
GACCACTGCT	CATCTTTTCT	GCTGCCACAA	CTCCAGTCCA	AGCCACAAAC	CTCTCTCTCC	16440
TGGACTCCTG	CGGGGAGTTC	CTTTCTCTCC	CTGCATGAGT	CTATTCTCCG	CACAACTGGC	16500
ATAGGTAAGT	GAGACTGCGG	AAGAGGCAAG	TTTGCAAGTC	CAGAGGAAAT	GAAGACTCTG	16560
CTTGTGCACA	TGCTGGGTTT	GACGGGTGCT	GGATATCCGA	TGGATGGCCC	TTAAGGTGAG	16620
CTCAAGGCTT	AAGGGAGAGA	TAGGGGCTGA	TGATCTGAGA	TTCATCAGTG	TGTGGCTGAT	16680
GTTTAAACCC	AGGGGACAGG	ATAAGAAGGT	TATTCCAGGG	AGAGCGTAGA	TAAAGAAGCT	16740
AAATGGCTTC	TGGGTCCTTA	GTCATTCAAA	ATCGGACCTC	TGAGGCAGGA	GGAAAGCCCA	16800
GAAAGAGTAG	ATTCCTGGGA	CTCACGGGAT	AAAGACTTTC	AAAAAGTGGG	GGCTGGCCAG	16860
TGCTGCTGAA	GGAAGTAGCA	GGACCGGAAC	AGAAGGGTAA	TCGTTGGACC	TGGAGAACTT	16920
GAATTTGAAT	TTTAAGGTTG	GTAACCTTAA	AAAAGAGCAA	TTTTAGATAC	CTTTTGAAAT	16980
TATTTGCAAG	ATTTGTTTGG	TATATGTGTT	ATTCCAGGCA	AAGGGACCAG	AAAAGTAAAA	17040
AATACTTACT	GAACAGTTAC	TGCATGCCTG	GCACTGTAAC	ACCCTGTTTA	ATTCTCACGG	17100
CAACCCTATA	GAGTAGGTGT	CATCATCCCC	ATCTTACAGA	TGAGGATATG	AGGTGCAGCT	17160
AGATTAAGCA	GTTTGCCTCA	GGTTACACCA	ACTGGTTAAC	GTAGAGCTAG	GATTTGAACC	17220
CGGATGGGCT	GATCCCAGAG	CTCATGCTTT	AAATCGCTAG	ACTGGTGCTC	ACAGAAGACT	17280
GGGACCGAAA	ААААТТААТА	ААААААТАА	GGAGCCCCCT	GGGCTAGCAA	ATTAGGAGTT	17340
GTTCAGACAG	ATGTGAAAAG	GAAAGCAAGG	CAGAGGGAAA	GTCACTGTAC	AGAAGAGAGA	17400
GACCCATGAC	AGCAGAGACA	GTGAGCTGGT	AAAGTGGCTG	GCGATCTAGC	CCCTGAAAAT	17460
ACCTCCAGAG	AGGCAGGCTC	ACGCCTGTAA	TCCCAGCACT	TTGGGAGGCC	GAGGTGGGCA	17520
		01 TD 05		(D1- 2C)		

GATCACCTGA	GGTCAGGAGT	TTGAGACCAG	CCTGGCCAAT	GGCGAAATCC	CGTCTCTACT	17580			
АААААТАСАА	AAATTAGCCG	AGCATGGTGA	CAGGCACCTG	TAATCCCAGC	TGTTCAGTTG	17640			
GCTGAGTCAG	GAGAATAGCC	TGGATCCGGG	AAGTGGAGGT	TGTAGTAAGC	CAAGATTGCG	17700			
CCACTGCATG	CCAGCCTGGG	CGACAGAGCA	AGACTTTTCT	TAAAACAAAC	АААСААААА	17760			
GAAAAAAGAA	AAGGAAAGAA	GAAAGAGACA	AAGAAAGAAA	GAGAGAAGGA	AAGAAAGGAA	17820			
GGAAGGAAGA	GAAGGAAGGA	AGGAAAGAAA	GAAAAGGAAA	GAAAGAAAAA	GAAAGAAGAA	17880			
AGAAAGGAAA	GAAAAGAAAG	AAAAAGAAAG	AAAGAAAATA	CCTCCAGAGA	GCCAGGTCTC	17940			
TTAGGCCTTC	TGAGAAACTC	ACATCCCTTT	TGATGAACAC	AAATGCTTCA	CACTCTCAAT	18000			
GTTATTGGTA	ATCCAAGTTA	TCAATATACC	TAAATCACTT	AGTACTGAAT	CTGGCATATA	18060			
GTAATCACCT	AATGAAGAGA	TAAGAGTCAT	GGAGTATTCT	GAAGCAATTA	GAATCAATAG	18120			
ACTCAATATA	CACATGGCAA	CAAAGTTGGA	TCTTAAAAAC	CGACCTGAGT	GAAAAAGGAA	18180			
AGGGAAAGAT	ACATAACACG	GTACCATTAT	GTAAATTGAT	AATATATGCT	TACACAATTT	18240			
GTAAGAACAC	ATACAAATAG	ATACATGTAT	АТТАААТАТА	CTCGAACGGT	TACCTATGGG	18300			
GTGGTGGCTG	GAGTGGGGGT	AAGTCCGTAA	GCTGTAATGG	AACCTAAACA	AATACATGAA	18360			
ACGAGTAGGA	ATCAGAAGGA	GTAACAATAA	AAATGTGCCA	TGAACTGAGG	AGTGTAAATT	18420			
AATCAACTCA	CTGCATCTGA	GGTTAAAAAT	AGAAAGATGA	TAATTGTTAT	TCTTATTACT	18480			
CGTAGGTCTT	CCACTTGCAC	TCAGCTTTAC	AATGTTGGAC	TATCCTTCAG	ATGGCACCCT	18540			
CCTTGCACTT	GCTCAGGCAG	GAGAGCTTTT	TCCTCCAGCT	TTCTAGGTGA	TTTAATATAT	18600			
CAGGGAATAA	GTATAAAAA	AGGCACGGTG	CTCCCTGGGT	AGCCTTTCTG	GACTTCAGAG	18660			
CTAAATTGCA	AAGTCAGTTT	TACACATGTG	ATTTCATCTA	TGAAATTAGG	GCAAGGTAGA	18720			
AAACTGGCAC	AGAAAAAATG	TGATTTATTA	TGGTGTTACT	ATCCCTTACA	AGCGGAGTGT	18780			
CAGCTGCCTC	TTTTTGTCCA	CTGATTTAAG	GCAAGATGAA	CTGAAAGTGG	CTATGATCAC	18840			
GTCTTCAAAA	GCACACTCTG				CCCAGCTGCG	18900			
SUBSTITUTE SHEET (Rule 26)									

TGTCCGGTGG TGACACAGTG CATAATTGTG GCGCCTTCCT GGTGCAAACT GTCTCACTTA 18960 GCTCCGTCTT GCTGGCACAG CAGAAAGGAA GAAATCGAAA ATGTTTGGAT TTCAAAGGTA 19020 ACAAGAAGCT GGAAAACAAC TACTGGCCGA GTCTGAGAGT TTCAGCGGAG ACTGGTGCAG 19080 CCTTGTGTTT TTCCACTGAC AGCTGAAAAT GAGCCCAGCT TCAGTGAAGC TTGTTTCCTT 19140 CCCTCCTCAA GGTTACCCAC AATTCTCAGT TCTCTCAGGA AAGCCAAAAA ATGAATTTGA 19200 GGGTTTAGGA TTGTGGTTCT TTTATCTATT ACAGGATTGA TAATATGTTC CTCCACCAGA 19260 TGTTCTGCTT GTAACAATAC TCACTTCCTG ACACTACTGC ATATGCAGGA GTGTTACTAC 19320 CAAGGTAAAC ACAGAATTGG CTGCCCAATT CCAAATCCCT GAACTGAGTG AGAGAAATCA 19380 GAATTATAAT AGGGGATTCA ACAGAGCTGG CTACGGATGT GCCAGTGGTC AGATACTTTG 19440 CTCATCATAC GCAGGTGCTG CTGCTCTAGC AACTGCTCAC TGCTTCATTT CCTGCCTTGG 19500 TCTTTAAATA CTGCTTTTCT CAGCTCAATT GGCTTTCTTC CCTCTGGCAG TCACGTTTCT 19560 TTGGGTCAAA CAGCAAATGA TTCTTTAGAA TCACCTGGTA CTCAAAGGAG CTACAAGACA 19620 TTGGGCATCC ACTTCCACTC TCTTGGAAAA ACAATTTTAT GGAAGCCAAG GTTGCCATAG 19680 TGCCTCTTGA GGTTGTTTGC TCAGCCAAGG CCCAAGCTTT GTGCTTCAAA CATGAAATTA 19740 GAGAGCTTCA GAACAAGATC CACATTTTCA ATGGCCTCAC CCAACTGGAT AAAAGAACAA 19800 TTGCCATATC TCAATGACCA CCTTTTTCAG GTGGGATGGT AGATGCTGGA ATGGGTCACA 19860 GCATTGCCCA ACCAAACTTT GCAAAAAAGG CTGGAAGCTC TGACTGGGGA CCCTAAATAT 19920 GCAAAAGTTG ATAGGCTCTT CATGCAGAAT ATGAACCCCG TGTATGGATA TAGCTAAAGG 19980 GTTGGCCTTT ATGTTTCTAT TCCTTCACAA ACCTGGTAGA ATAGATATGC TTGTTTCCCT 20040 TTAAAAAATG TCAACAATTG CATTTATGAT GCTGTGTATA GTAACTCACA GATCATGCTC 20100 CATGAAAATG CTTCAGAACC CAATATAAGG AGATTTTTTA GCCATGTGTG ACAAAAGAGA 20160 GGCCATTTCA GTGTTGAAAT TGTTCAGAGA AGTATTTGAT TATGTTTTCT CAGATCTTTT 20220 TATTTTATT TTTTTGAAA CAGAGTCTCA CTTTGTCACC CAGGCTGGAG TACAGTGGCT 20280

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GTGGTCTCGG	CTCACTGCAA	CCTCTGCCTC	CCAGGTTCAA	GCGATTCTCC	TGTCAGCTTC	20340
CCGAATAGCT	GGGATTACAG	GCGCATGCAC	CACCATGCCT	AATTTTTGTA	TTTTTAGTAG	20400
AGACAGAGTT	TCGCCATGTT	GACCAGGCTT	GCCTTGAACT	CCTGACTTCA	GGTGATCCAC	20460
CCACCTCAGC	CTCCCAAAGC	ACTGGGATTA	CAGGCATGAG	CCACCGTGCC	CAGCCTGTTT	20520
TCTCAGATCC	TGTATTTGTT	TCTGAAGCCT	ТСАТТТСТАТ	CTTCTTATTC	ATTTTGGAAG	20580
TAGTACACCT	AAGTAAGGTT	TTTAACAATC	AAATATCTTT	GGAAAATTCC	CTGGTTCCTT	20640
TCTTATTCCT	ACAAAAATAT	GTTCAGTATA	GCTGATGTTA	TGTTTCTTTC	AAATTATTCA	20700
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CATCCAGTTT	CTGGTCTCTT	ATTTCACTCT	AAGTCTAAGT	GGCTATTAGA	ATAAAGAGCT	20820
TGTAACAGAT	TCTTTCTCCA	ATATGTCTTA	TCTTTTGACT	GCATGCCAGT	GACAAACTGT	20880
TAACTGTTTT	GATTCTTCAT	AACATTCCAC	AGAACATGCT	GACTCCTCTC	TTCCTGAAAG	20940
CAATGCCCAA	GCACAGCATT	GTTAGATAGT	ATGTACGCAA	CAGGGACATG	GGTGCATAGC	21000
AAAAACTAGA	AGGAAGGAGG	ACCTTCCTTA	GCAATGGGTG	ATATGGTCCC	TGGACTTAGA	21060
CTCCAAAGGG	TCGTGAGGTG	AAACACACAT	CGTCCATACC	CAGGAAGCAC	ACAGGTGGGA	21120
TGGAAGAGCT	GTGCCTAATG	AAACTTCATC	CACGTGGAGG	TGGAGGAGGC	TGCAGCTGCA	21180
AGAACTCAGA	GCTGCCTTAC	CCAGACCAGG	GACCAGGGAG	GGCTTTCTGG	AGGAAACAGC	21240
CTCTGAACTG	CCAGCTGATA	GAGGAGCTCT	ACCTCAACTC	TTCTGGTTCC	CCAGGGCTGC	21300
TTTTCCACGT	CCATTTATTG	GCACTGAAGT	TTGAATACCT	TCAGGGGCCC	GAAAGCCTGC	21360
CAGGTCCTCT	TCTCTGCAGA	GCAATCACAC	CAACCTGCAA	AGGGCTAGGA	AAGGGCTGTC	21420
ATCATCTCCT	ACTCAGAAAC	TGGTTCACTG	GAAGGACTCA	GGGGCCACTG	AATACATCCT	21480
GGCAGCTTTC	ACAAGAAGGG	CTTCTGACTC	AAGGATGTTT	CCATCTTTGC	CAGGTCGCCT	21540
TTTCTCCTTC	TCTTAGAGTT	TGGAGGACGC	AAATGTGCTG	AGAAGTCAAC	CTTTCCTGCA	21600
AGGTGAGACA	CAAGGGCCTT	TCCCAGCAGA	AAGAAGAGAG	CAAATGGAAG	GTCCTTCTTC	21660
		rogi io	Tagus antrr	(Pule 26)		

CTCCAGTAGA	GGATGGACTC	TGTCTGGCAG	CCACCCAACA	GGAAAAGCAC	AATGCATGCC	21720
TGCCTGCTTC	CCTCCCTCCC	TCCGTTTCTC	CCTCCCTCCC	TCCTTCCTCC	CTTCCATTCT	21780
CTTCCCTTCC	CCTCCCTTCC	CTTCCCCTCC	CTTCCCTTCC	CCTCCCCTCC	CCTTCCCTTC	21840
TCCCTCTCCT	TCCCTTCCTC	TTCCCTTCCT	TCCTCTTCCC	TTCCTTTCCC	CTCCCCTTCC	21900
TTTCCCTTCC	TCCCTCCCTT	CCTCCCTTCT	TTCCTTCCCT	TCTTTCCTTC	CTCATTTCCT	21960
CCCTTCCTTC	CTTCCTTCCT	TCCTTTCTTC	CTACTTTCCT	ACCTTTAGGG	CTCTGTGTCT	22020
TTGGAGTCCA	TTCTGATTAT	GCTGTAATGT	CTGCCCCTTC	CTCTTCTCTG	TCAAAAAATG	22080
AAAGACATGG	AAGCCACTTG	CCTTTTACTG	ААТТАААААТ	TAGTAAAAGA	GCTAAAAATT	22140
AATGGTTAAA	AATGTACGCA	TAAATTATGC	AGTATACTAA	CCAATGAAAA	GATACACTTC	22200
TCTTAATTAA	AAGCTGACAG	GGAGGGAAAC	AAGAAAAGAG	AAACACAAAA	СААТААТСТА	22260
AATGACCTAT	TAGTTGGAAG	AACAACATCA	GAGAAAATAG	ATACTGTGTA	TAGTCATGTG	22320
TATGTCTATG	GAATAACATT	TGTAGAGAAA	TCTGGACTGA	TCCTTTCTGA	GTAAAGAGAG	22380
CTGTGGGTAC	AATTAAGGGG	AGATTGAAAG	GAATCCAAAA	GCATAGCAGA	TGCTGTGCCT	22440
CACTGGAATG	GTTGCCGATC	TCCTCCAAAC	TATGAAGTGT	TTGAGGCTCA	ACTTTAATAT	22500
AATTAAGATA	CAAAGACAGA	ATGAGAGAAA	GAGAGAAGGG	AGCTCACTGG	AAGAACACTC	22560
AAGATTCCTT	ACTACTCATT	СТСТААААТТ	ACAATTGTTC	TAGATGGAAA	AGAAAAAAG	22620
CTTCTCTGTT	AAAAAAGGAG	CTTGTGCTAT	AGGAGGTTTA	AAATATACTT	CTGACCCATC	22680
TCCAACATTC	TAAATCCTTC	CCAGAAAAGT	ATGCCAATCC	CAAGAAATAT	TCAATCAAAT	22740
TGCTGGAAAG	AAAAATACAA	AATATTAAAA	TGTATTAGGA	AGCGACAGTA	ATTAAATCAG	22800
AACTGGAGCA	GGAATAGACC	AGCAGATCAA	TGAGACAGAC	ATCAAGTCCC	GGAATGTGGA	22860
CTTGCAAATG	CATTAAGTAA	TATGATATGC	AATAAAGGTG	GCACAGTGAA	CCAATGGGAA	22920
АААААТТААТ	СТТАТААТАА	TTGATATTGC	AATAATTGTC	TAGTAATTGG	GGGAAGAAAT	22980
AAGCTTATTC	CTTATCTCAT	TTCTTTTTT	CTTTTTGAGA	CAGAGTCTCA	CTCTGGTAGC	23040

CCAGGCTGGA	GTGCAGCGAT	GCGATCTCTG	CCCACTGCAA	CCTTGCTCTC	CCGGGCTCAG	23100
GCGATTCTCC	CACCTCAGCC	TCCCGAGCAG	CTGAACTACA	GGCGTGTGCC	ACCACTCCCG	23160
GCAATTTTTT	TTTCCATTTT	TAGTAAAAAT	GGGGTTTCAC	CATGTTGCCT	GGGCTGGTCT	23220
TGAACTCCTG	GGCTCAGGCA	ATCCACCCGC	CTTGGCCTCC	CAAAGTGCTA	GCATTACAGG	23280
CATGAGCCAC	CGCGCCTGGC	AGCTCATTTC	TTAGACTAAA	TAAATTGGAG	ATGGCTAAAA	23340
GATTTCTATG	TAGGCCAACT	ATGTTTTTAA	AAAGTTTTTT	TTTTAAGGAT	ATCTGCTGGA	23400
ACCAATCATG	CCACCAACCA	AAGATGCAAG	ACTATAAAAC	ATACCCAGTT	TTTCAAAGCA	23460
TTTAAAAATT	ATTCTAAAAA	TATTTTTTCT	CCAGAAATTT	TGCATTGATT	CCCTGAAGAA	23520
GCATTAATAT	GGGACCTGAC	TTATAAAATG	ATGAACTCAA	TCTCCCCACT	CAAGGTAGGA	23580
GTCTCTCAGA	ТТТААААААТ	AAGCATCCTA	GTCCTCTTGT	CCCTGTAAAA	GTTAACCCTT	23640
ACACCTGAAA	CACCAGGAGA	CTGGCGGTTG	TTTGCATAGG	GGTTACAATT	AAAGTTGAGC	23700
TACCTCTGAC	ATCTATTAAC	ACCAAAATTA	GTAAACTATG	CATGTATGGA	GACTTTTATG	23760
ATTGAACTTG	TTTATTGAGT	CAAGAGATAT	AGTTTACAAT	GAAAATTTGG	GGCATATCAA	23820
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TTAGTTGCTT	AGGAAAAATA	CAAACACACA	CACTTTAAAA	ТТАТАТТААА	ATCCCGTCCT	23940
AAACCTCAGA	GTCCAGAACC	GCATCCTAAC	ACTGGTCATG	CATAATATGT	ТТАААТТТТ	24000
GTGCTTTAAA	AACTACAAAT	AAGGAATGTA	TTAATAGTTC	CACAATCAAT	GGTCAGTTAG	24060
CCGAGGGAAG	ATTAGCATAG	TTAAAGACTT	AAAATGGCTT	TACAACATAT	ATCAAAAGGA	24120
CAAAATAAGG	GGAACAGAGT	CTAGAAATGA	GGAAACTGGG	ACACAGGCAA	АААААААА	24180
TGAGAACTGG	GACATGAATA	ACGCAAGGGA	TAAGACTAAT	ACACAAAACA	CCCCAAATAA	24240
ATAGCCAGCA	TTTGCTGAGC	TCTTACTGTG	AGCCTGTTCT	AAGCACTTTA	САТАТАТТАА	24300
CTCATTTCAT	CCTCAAGGAA	CCATCTGAGG	CAGGCACTGT	TATCATCTCC	ATTTTACAGA	24360
TAAGGAATAG	ACCCAGAGAG	GCTGAGCAAC	TGGGCCTATT	CCACAGCTAC	TATGGTGGAG	24420
		CI ID CI		(D.d. 26)		

ATGAGATTTA	AATCTAATCA	TTGGCTCCAG	AGCCCATGCA	CCCAATGGCT	GCACTAAGTG	24480			
AATGCATGCG	CTATCAACGT	TGCCAAAAGT	GGGCCACAGC	TCGGATCTGC	GTTTTCCAGT	24540			
AGCCAAAGCA	GAGAGTGTGA	TCAGACCTCA	CTTTAATAAG	CAAGTCTCAA	GCCAGAGAGA	24600			
GGTGGTATCA	GGCAGCAAAC	AGGCTGCTAG	TCGAAATCCC	ACTTCTTCTC	TGAGTGGTCC	24660			
ATACAGTTTT	ACTCTACTTG	CTTACAGAAT	GAAAATAGCT	GGAGTTCAGG	TGCGCTTTCA	24720			
ATGCCCTGTT	GTCAGGATTG	GGCTTTTCAA	GTTTATTTTT	TGTTGTTGTT	TTTAATAGAC	24780			
TGTACTTTTT	AGAAAATTTT	TAGATTTACA	GAAAGATTGA	GAGGATAGTA	CAGAGAGTTC	24840			
CCGTATACCT	CACACCCAGT	TTCTGCAATT	ATTAACCTCT	TACATTCATG	CGGTACATTT	24900			
GTTACAATTA	ATGAGCCAGG	GCCGGCCGGG	CACAGTGGTT	CAGGCCCCTA	ATCCCAGCAC	24960			
TTTGGGAGGC	AGAGGCAAGC	GAATCACTTG	AGGTCAGGAG	TTCGAGACTA	GCCTGACCAA	25020			
CATGGTAAAC	CCTTTCTGTA	СТАААААТАС	AAAAAATTAG	CCAGGCATGG	TGCTGGTTGC	25080			
CTGTATTCCC	AGATACTCAG	GAGGCTGAGG	CACAAGAATT	GCTTGAACCA	GGGAGGCGGA	25140			
GGTTGCAGTA	AGCCGAGATC	GTGCCACTGC	ACTCCAGCCT	GGGCAACAGA	GCGAGACTCC	25200			
АТСААААААА	AAAAAAAAA	AAAAAGAAGG	AAGGAAGGAA	GGAAAATTAA	TGAGCCAATA	25260			
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TGCTTAGGCT	CCTCTTGGCT	AGACTGAGTT	ТТААТСТАСТ	TTCTGCAGAG	CCTGAGAACT	25440			
TTAGCATAAT	TTCCTTGGAA	ATTACAGCTC	AATATTTTCA	AGCACTTATA	CAAACAGCCT	25500			
AATGTTACGT	TGGCCCATAA	CAGTGTTTCA	AGGTAATAAA	CTTCTTTGTT	TTCTGTGCCG	25560			
ATTGAAAGAA	. CTGCTGCTTA	GCCTCCTGCC	AGATGATGAA	CTGGGTACAC	ACGAGCATTT	25620			
TTCCAGGTAA	AGCATATTTC	GTGCGACTTC	TTAAGCTGCA	GCCTTATATG	CAATAATTGT	25680			
CCATTTACAA	GACTTATGTT	CGAATTTCAG	GCACTCTGTT	TTCACTAACC	ATATCCTTCA	25740			
ACTTTGATAA	GTACTGCTTT				TTTTTTTCAC	25800			
SUBSTITUTE SHEET (Rule 26)									

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CATCAGTTTT TTTTCTGTTG ACTCTTTCTC CTTTTTCTGT TTGCCCAGAA ACATGCTCAG 25860 GATTCTCTCA GGCTTTAAAA AATGAAAAAA TGTTTCCTGC AATCTAGTTA CTCCTTGATT 25920 CTCTTGTTCT GTTTATCGCT GGAATTCTTG AAAGCTTGGT GTATTAGTCT TTTTTCATGC 25980 TGCTGATAAA GATATACCTG AGACTGGATA ATTTATAAAG AAAAAGAGGT TTAATGGACT 26040 CACAGTTCCA CGTGGCTGAG GAAGCCTCAC AATCATGGTG GAAGGCAAAA GGCATGTCTT 26100 ACATGGCAGC AGACAAGAGA GAATGAGAAC CAAGGGATTT CCCCTTATAA AACCATCAGA 26160 TCTTGTGAGA CTTATTCACT ACCACAGAA CAATATGGGG TAAACCGCCC CCATGATTCA 26220 ATTATCTCCC ACCGGGGCCC TCCCACAACA CGTGGGAATT ATGGGAGCTA CAATTCAAGA 26280 TGACATTTGG GTGGGGACAT GGCCAAACCA TATCACCTGG CCTATAGCAT TATTTCCATT 26340 TCTTCCCCAT CCTTTTATTC CTCAAACCGG TACAACCAGA CCTCTTTTT TTTTTTCTA 26400 CCTGAAACTG CTCTTTTGAG GGTAGCTGAT AAGTCCAAAA TACTGTCACC TTTTCTCAAT 26460 TCCGTTCCTT CTTATGCCTT TGGAGCAATT GACTGTGTTG GTTGCCCCCT CCTTTAAAGT 26520 GTCTCTCACT TGGTTTTATG ACTAATGATG ATTTTCTTTT TCCTCTCTAA ACATTCCGCT 26580 ATCTTTTAG CTTCCCTTCC CCCTCCATC CCCTAAATGT CCTTGTTTCC CAGAATCTGC 26640 CTCACCTCTT TGACTTCTCT ATGCCCTGTC ATTCACTCAT GGGTCTTTAT TACATTATTG 26700 CATCTGTGTC AATAACTCTG GTCTTTCTGT TAAGTTCCAG TCTCCCATTT TCAAATGTCC 26760 CCAGACATTT CCAATTGAGT ATCTCTCCAA TGTATTTAAC CTGCTAAATA TCTAACACAT 26820 AATCTTTCCC ATCAAATCGT TTCCTCTTAA GCTTTTCGTT ATTTCCTATT AGACTCCTGC 26880 ACTTCTCCCA GGAGCCCAGA CTTAAAACCT TGAATTTCTC ACCATAACCT CTCTTTTGTC 26940 TCCCATAATC AATTAGTAGC AAGTGTTATC AATGATTACT TGACAATATC TTTTTCTATT 27000 TCCCTCCCTG CTATGATCAT TCATCTAGCA AGAAGAGTTG GCCCTTTGTA TCTGTGGTTT 27060 CTGCATCCCT GGATTCAACC AACTGTAGAT GGAAAATATT TGAAGAAAAA AGCGTCTATA 27120 CTGAGTATGA AAAAATTTTA TTTCTTGTCA TTATTCCCTA AACAATACAG TATAACAACT 27180

ACAGCATTTA	CACTGTAGCG	TATAGATCTT	ATAATCTAGA	AATGATTTCA	AGTACACCAT	27240
TATATATAAG	GGACTTGAGC	ATCTGTGAAG	TTTGGTATTT	GTGGGGCATA	CTGGGACCAA	27300
TTCCCCCATG	GATACAGAGG	GACAACTATA	TTTACTCAGT	GCTTACTAAA	TACCAGTTGG	27360
CCAATGTGTT	TTTCTTTTTC	TGTTTTCCTG	TCTTTAGTTT	GCCCCTTGCC	AATTAATTCA	27420
ATAGTGCTGC	CAATGCCAGG	TGTACCTTCA	GAATATTCTA	TTCTAATTTT	GTCATCTCCA	27480
AGCTTAAAAA	TATTTAATGG	GCCAGGCGCA	GTGGCTCACA	CTTGTAATCC	CAGCATTTTG	27540
GGAGGCCAAG	GGGGGTGTA	TCACTTGAGG	TCAGGAGTTC	CAGACCAGCC	TGGCCAACAT	27600
GGCGAAACCC	TGTCTCTACA	AAAAAGTATA	AAAGTTAACC	AGGTGCTGGA	GCATTTGCCT	27660
GTGGTCCCAG	CTACTCAGGA	GGCTGAGGCA	GGAAAATCAC	TTTAATCTGG	GAGGTGGAGT	27720
TTGCAGTGAG	CCAAGATCTC	TCCACTGCAC	TCCAGCCTGG	GTGACACAGC	AAGACTCTAT	27780
CTCAAAACAA	CAATAACAAC	AACAACGAAA	AACATTTAAT	GGCTGCACCT	TGCCTGTGAA	27840
AAATGCATTT	CTTGGCCAGA	TGTGGTGGCT	CAAACCTGTA	ATCCCAACAC	TTTGGGAAGC	27900
TAAGGCCAGG	AGTTCGAGAC	GAGCTGGGAT	ATATAGGAAG	ACACAATCTC	TACAAAAAA	27960
AATCCACAAA	ATTAGTCAGG	CTTATTGTTC	ATGCCTGTAG	TCCCAGGTAC	TCAGGAGGCT	28020
GAGGCAGGAT	TCCTCAAGCC	CAGGAGTTCA	AGGCTTCCGT	GAGCTATGAT	GGCACAACTG	28080
CACTCCATCT	TGGGTGACAG	AGCAAGGTCC	TATCTCTGGA	GAAAAAAAA	AAAAGAAGGC	28140
ATTTCTTAGG	AGAGTTCTTC	TCTGTAGAGT	CCTAAGGGTT	CCATGGAACT	CCTTAAAAGC	28200
ATCAGAGTAT	GTGAGTGCAA	TGGGAGGAAG	CATTTAGCCA	GAGCAGTTGT	GCTCCCATTG	28260
CATATTAATT	TTTAAAAAAC	AAAGCTATAA	AAAAAGTTG	AAAACTACTA	CGTTAGCATC	28320
AGCCTGACAT	TTAATGGCCT	CGTAAATCAA	ACCTTAATTG	ACTTTTTAGC	CAGTTATGCT	28380
ACTAGCCAAC	TACAGACAAC	ACACTTTTTA	ACCAAATTAG	ACTAATAGTT	GTCATCAGTG	28440
GAAATCAAGT	TTGCCATTCT	TCCATGCCTT	TGCTCACACC	ATTACCTTTT	CTGGAATGTC	28500
CTGTACTCAT	CTTCCTGTGT	TGAACTCTAT	ACCCAACTTT	AAAAACCTAG	CTCAAAGTTC	28560

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AACACTTCCA TTCCATTTCA AAAAGAGCTT TCCTCTTCCT TAAAGTTTAA GAACTCATTT 28620 TCATGAATCT TTTTGGCATT TATTGCACAC ATGCTTGCTT TGTGTTATTT GTGTTCAGCC 28680 TCATATGCCC CCAAGGTGTT TTAGACTCCT TAACGGCAAA AATGATGCTC TAAACACCTT 28740 TCTATCTTTC ATAGTGTCTT AGTCTGTTTG TGTTGCTATA AAGGAATACC TGAGGCTGGG 28800 GAATTTATTT AAAAAAGAGG TTTATTTGGC TCACAGTTCT GCAGCTATAT AAGAAGCATA 28860 GTGTCAGCAT CTGCTTCAGG TGAGGGCTTC AGGAAGTTTC CACCCATGGT AGAAGGCAAA 28920 GGGGAGCAGG CATCACATAT CAAGAGAGGA GGAAAAAAAG GAAGGAAGAA AGGAGGGTGC 28980 CATTCTCTTT CAACAATCAG TTCTTGTGGG AACTAATGGG ACAAGAGGCT GGGCACGGTG 29040 GCTCATGCCT GTAATCCCAG CCCTTTGGGA GACCAAGGTG GGTGGATCAC CTGAAGTCAG 29100 AAGCCTGAGA CCAGCCTGGC CAATGTGGTG AAACTCCGTC TCTACTAAAA ATACAAAAAT 29160 TAGCTGGGCC TGGTGGCGTG TACCTGTAGT CCCAGATACT CAGGAGGCTG AGGTAGGATA 29220 ATCACTTGAA CCCGGAAGAC AGAGGTTGCA GTGAGCTTGT GCCACTGCAC TCCAGCCGGG 29280 GCAACAGAGT GAGACGGTCT CAAAAAATTT TAAAAACTTT AAAAATAATA GAGCAAGAAA 29340 GCACCAAGTT ATTCAGGAGG GATCCACCCC CAATGACTCA AATACCTCCC ACCAGGCCTC 29400 ACTTCCAACA CTGGGGATCA ATTTCCGTAT GAGATTTGGA GGAGACAAAT ATCCAAACTA 29460 TATCACATAG TAATGAACAT AGTACCTTAT CTATAGAAAG CAATGGCTAG ACAACTGTTG 29520 AATGGCTAAC CAAATCTGCT TTCCTATGGT CTCGCTCTAG AGGGGGTCAG TATGAGTTTC 29580 TGTCAAAAGG AGAAAAAAAA ATGTATAGTC AGTTTTGTGT GTGTGTGTGT TCATGTAAAA 29640 GAGATCAAGA GAAAAGAACA AGAGAAATCA TGAAAAGGAG GGGGAATATA AGAATAATAC 29700 ATAGAAAAA GCAAATTATC TTGTTTATCA GTAATACCCA AGGGGGTAGA AATGGTAAGT 29760 AATAATCCTT CTTCACTTTG TCTGTAGTTC ACTTTTTTGC ACCTTTATTT TGATGAATTC 29820 ACATCGAAGA CATTAACTCA TTAAGGCTTC CAATATTTTT GGAGATAAGA AGGGCTGCTA 29880 TGCTCTTTAT AGATGGAAAA CTTGGGTCAT TAATAACTCA AACAAGGACA TAACAAAGAA 29940

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ATGGAGCATA AACTGCCAGG TCCTGACTGT AGATTTGGAT TCCCAGTTGG TGTCTTGTCA 30000 CCCTTGTTA CTCTTCCTAA AGTTATGATC TTTTCTTGTG CATAGGAAAT TCATAGTGAT 30060 TTCCCATCAC CCTTGGGATT ATCATAGCTC CTTTAAGGTC CCCTCTATGC ACTCAATAAC 30120 ATCAACAGTA AGTGTTCTTC GAGCACTTAC TGAGTGTATA TCATTGTGTT CTCACGCAGC 30180 ACCCACAGAT CTCACCAAGA ACCTAGCTGA AGCCTGTAGA ATGAATAGGT AAGTACTGCC 30240 ATGCCAATCT GGAGTACTCA AGCGATGCAA ATGATTCCTT TAATTGTACT TTTGCAGGCT 30300 TGTCAGTTTT GCTCATGGAG AAGTGGCTAC TGCATCCATG TTATATCTAT GTAATGTTGG 30360 ACTGCGAAGC ATCACTTGAC TTTTTCCAAG CAGAAATTAC AGCTGATGAC AAGCTGCTGC 30420 TGAGAAAATG GATATTTTTC TGAATTCAGT TCTACGTGGA AACAGCTGAC TAGTTTCCAT 30480 TGCTGTAAGA ATGGCTCTTT TGCTCTTGGT TGATTTTGAG TAATGGCTTT ACTTCTGTAG 30540 AAAGGAGATT TCATTTGAAG TCCACTCAGG GATTTGGTTC AACAAACTGG AGTACAGGTT 30600 TCAGAAAATA TCTCTTTAAT CCTCCAATAA TAAATTTTCT CATCTATAAT TCCTGGAACA 30660 CTTCATCCTT TGCAGCCGAG CATATAGATA GATTTGTTGC TCACTGTGTT CTGATTGCCA 30720 CTTTGACCTG CTTTTCAAC TTAGGTTACA AATAGAACAG AATCTCTCTG ATTTTTCTCA 30780 TTAATTGTTT GAATTCCCAC TTTTCCTCAT TAGCAAGAAG TCCAGTATCT TCCTGAGAAC 30840 TTCCTTTTCT CAATCTAGGA ACTTACTTGG TCCATAAGGT AACAGTCTTA TTTCTGACTA 30900 TCAAGGAGA AAATAACAGG AGCCATTATC ATCTTCATGG TGTCACTTTT GAAAACTGGT 30960 CCTCTGTAGA TCTTCAGATT CTTGCGTTAG TCCATTCAGC TGCTATAACA AAATTGCATA 31020 GACAGCATGG CTTATAAATA ACAGAAATGT ATTTCTGACA GTTCTGAAGG CTAGAAAGTC 31080 AAAGATTAAG ACACTGGCTG ATTTGGTGTC TGGCGAAGGC CCATTTGCTC ATAGATGGAC 31140 GATGACCTTT CACTCTGTCT GCACATGGCA GAAGGGCAAG AGAGCTCTCT GGGTCTTTTT 31200 TATAAGGGCA CTAATCTCAT TTTTGAGGAC CCTGCCCCCA TGACTTAATC ACCTCCCAAA 31260 GGCACTGTCT CCCAATACCA TCACCTTGAG GGTTAGGATT TCAACATATG ATTTTGGGGG 31320

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GACAGAAACA CGCAGTCCAT CTCGCTTGTC CACTCCATGG TGGTATTCTT GCTGGATCAG 31380 TTTCCTCCTT GGGGTGCATT TGTGTTCCAT GTCTAACTTG CAAGTTATAG CAGGCCCGAT 31440 AGCAAAGTAT TCCAATGTTG GTATGCAGAG GCATTGAATA ATCAGAATGA ACCCACGCCA 31500 TAAACAACTG GTAGAGCTGC AGAGAGTACC AGCTGATTAT GAGCCCTGGG TAACAGTGGT 31560 TTTTAGTTCC TATGTCCGTC AGCCCTTTTC TCCCATAGTA GCCCCACTGT GTTGAAGTGG 31620 CTGAATCGAC AGAAGCTTCC AGCTTGGGCC ACATGCTCAT GGAACCAATT CTCCTTATGA 31680 GCCGTACAAG AGCTGGGTTG CCATTCTGGA TACCCTCTTT TTTCAAGAGA TTTTATTTCA 31740 AGGATATTTT TTCTTTTATC AACTACAGGG ATTATTTAGA ATCTTAGGGC AGTGGTGCCC 31800 AACCTTTTTG GCCCCAGGGA CAGGTTTTGT GGGAGACAGT TTTTCCATGG ACCAGTGTCA 31860 GGGGGCTGGG AGGCATGGTT TTGGGATGAG TCAAGTACAT TACGTTTGTT GTATACTTTA 31920 TTTCTATTAT TATTATATTG TAATATATAA TGAAATAATT ACACAACTCA CCATAATGTA 31980 GGAATCAGTG GGGAGCCCTA AGTTTGTTTT CCTGCAACTA GACAGTCCCA TCTGGGGGCA 32040 ATGGGAGATA GTGACAGATC ATCAAGCATT AGATTCTCAT AAGGAGTGCT CAGCCTAGAT 32100 CCCCGGCATG TGCAGTTCAC AATAGGATTT GCTCACCTAT GAGAATCTAA TGCCACTGCT 32160 GATCTGACAG GAGGTGGAGC TCGGGCAGTA ATGCGAGGGT TGGGGAGCAG CTGTCAATAT 32220 AGATGAAGCT TTGCTCGCTC GCCTGCCACT CACCTCCTGC TGTGTGGTCC ACTTCCTAAC 32280 AGGTCACAGA CTGGTACTGG TCCATGGCCA GGGAGTTGGG GACCCTGTCT TAGGGAGTAG 32340 GGGTGGAGTT CCCTTCACTT CTAGAAGGCC CTGGATTAGT ATCCCAGAGC TGTCATTACA 32400 GAGTATCACA AACCAGGTGG CTAAAAACAG ACATGAATTC TCTCTTATTT TTGATGGCTT 32460 GGAAGTCCAA AGTCAAGGTG CTGCCAGGGC CATGCTCCCT CTGAAATGTG TAGGGGAGAA 32520 TCCTTCCTTC CTCTTTCTAG CTTCTGGTGG TTTGCTGGCA ATCACTGGCA TCGCTTGGCT 32580 TGCAGCACTT CAACATCTGC CTTTACTGTC TCATAGTGTT CTCCCCTCAT GTCTCCAGGT 32640 CTCTCTGTCT CTCTTCTTG TATAAGGAAA CTAGTCATAT TGGATTAAGG GCCAACCCTA 32700

CTCTAGTATG ACCTCATCTT AAGGTCACAT GCAATGACTA TTCCAGATAA GGTCACATTC 32760 TGAAGAACTG GGAGTTAGGA CTTCATATCT TTTGAAGGAA CACAGTTCAA CCAATAACAG 32820 CCCCTGTACT GTTTTACAAA TAGGTATTCC TCTCCTTCCC AAAGTTCTTC ATAGCAGAGA 32880 CAACTTGTAC CAAAAGGCAA AATACCTTAT TATGTAACCT TAACCTAGGA TCATAGATCC 32940 CTACTGTCTG GTGCTTTATA AGCACAGAAC CACCGGGAAA TCATTATTAA GACAAGGAAA 33000 GGCCAAGTGC AGTGGCTCAT GCCTGTAATC CCAGCACTTT GGGAAATTGA GGCGAGTGGA 33060 TCAACCTGAA GTCAAGAGTT TGAGACCAAA CTGACCAGCA TGACAGAACC CCATCTCTAC 33120 TAAAAATACA AAAATTAGTT GGGCATGGTG GCATGTGCCT GTAATCCCAG CTACTCAAAA 33180 GACTGAGGCA GGAAAATCAC TTGAACCGAG GATGCCAAGA TAGCAGTGAG CCAATATCGT 33240 GCCACTGCAC TCCAGTCTGG ATGATAGAGC AAGATCCTGT CTCAAAAAAT TAATAAATAA 33300 ATAAAAAGAC AAGGAAAGCC TTTTCCAAGG AGACCCTTCT GCTTTGCTAG TTCAGAGAAC 33360 TTCTCTTTTG GAGAAAACAA ACACCCAGTC CATTAGCAGC AACGTCAGGG ATTGAATTCT 33420 TAGGGCAGCA GGCTGGCCAC AGTGGCTCAT GCCTGTAATC CCAGTACTTT GGGAGGCTGA 33480 GATGGGTGGA TCACTTGACA TCAGGTGTTC GAGACCAGCC TGGCCAACAT GGTGAAAACT 33540 CATCTCTACA AAAAATATGA AAAAAAAAA AAAAAAAAA GCTGGGTGTG TTGGCTTATG 33600 CCTGTAGTCT CAGCTACCTG GGAGGCTGAA GCAGGAGAAT CACTTGAACC CGGGAGTTGG 33660 AGGTTGCAGT GAGCTGAGAT TGCCCTACTG TACTCCAACC TGGGTGACAG AGAGAGACTC 33720 CATCTCAAAA AAATAAAGAA TTCTTCGGGC AGCAGTCTTT CCTCCACCTC ATAGACCATG 33780 33840 TGACTGGGGC AAAGACAAAG GTGAGGAAAA TGACAAGTTT GAGGAACTAT GAGACCAGGC 33900 AGTGGGGAAC ACCACTAGCA GAAATGATGG AAGTTCTCAA GAATAACAAC AGAGAAATAG 33960 ACCATGGCCA GAGTCTAGAA CCCTCCAGGG AAAGGAGATG GGCTCCAGAG GCAGAAGAGG 34020 ACGTTGAAGG GAATGGGGAG TGGGTGAAAT ATATAGACGA TGGGGACCAC CCAAGAGCAG 34080

TCGCTATTGC	AAAACTGAGG	AGAAGGAGAG	TCTGGAGGGG	GTGGTGGGAA	GCTGGGTCTC	34140
CTAAGGAGGT	TTTGACAAAA	GCAGTCATGG	AGCGGGCTTA	GAAATCACAG	TTGGGGACAG	34200
GGTAAAGTTC	CTCGGGATAT	AGAGGATGAG	ATTAGAAGAG	GTTCCAACTA	GGGTAGTGTG	34260
GAGAAAAGCA	CTATTGACCC	AAAAAGGAAG	GAGAATGTGG	GTGGAAGTGG	CAGAGAAAGA	34320
GGGGTTTGAG	CAGAGAGTGG	TGATTTTTCT	AATGCAGAGT	TGTGGGAGGT	GGAGTGCAGG	34380
GAGCCAGGCT	GGGTGGCTGT	GCTGATGTGA	TTAAGCACTT	ACTGACTGCC	AGGCAATGGG	34440
CTAAGTACCT	GAGATGCTTT	GTCTGTTATC	CCTCCCGAAA	CCCCTCTGAG	CAGGTGCAGT	34500
TATTATTCTC	ACTTCACAGA	TAAGGAAATT	GAGGCACAGA	GAATTGAGTA	ACTTACCCAA	34560
GGTGACATAG	CTCATATATG	GTAAAGCAGG	CTTTGAACTC	AGTCTAGCTC	CCGAACCTAA	34620
GCTTGTAACT	ACTATGCTTT	TCCCAAAAAA	AGGGGGCTGG	CACAAAAAGA	GCTGAGGGG	34680
CTGGGCATGG	TGGCTCATGC	CTGTAATCCC	AGCACTTCGG	GAGACTGAGG	CAGGTGGTTC	34740
ACCAGAGTTC	AGGAGTTCGA	GACCAGCCTG	GTCAACATGG	TGAAGCCCTG	TCTCTACTAA	34800
АААТАСАААА	ATTAGCTGGG	TGTGGTGGTG	TGCACCTGTA	GTCCCAGCTA	CTTTGGGAGG	34860
CTGAGGCAGG	AGAATCGCTT	GAACCCCAGA	GGCGGATGTT	GTAGTGAGCC	AAGATCATGC	34920
CACTGGACTC	CAGCCTGGGT	GACAGAGTGA	GACTCCATCC	AAAAAAAGA	AGAGCTGAGG	34980
TGATGGCCAC	CATCAGCATC	AGCCTGGAAG	TTATAGCAGG	ATGCTAAGTT	TCTCTAAAGC	35040
TGTCTTTCTT	AGGACTTGAA	AAAGATAACT	TGGGTTTGTA	TCCCATCTCT	GCCATTAGTA	35100
GTTTACTGGC	TTTGGATAAA	TTACTTAGCC	TTACTGAACC	AACTTTGGAT	TTTTATAGAG	35160
ATACTGTAAT	GAAAGGAATA	AGGTATCAGT	CTTAGCAGAG	CATCCAGAGT	GTTCCTATTA	35220
AAACCTAAAT	CATATCCTGT	CATTGCTGTG	CCCCAAACCA	TTCAATGGCT	TCCCAACTCA	35280
AAGTTAAAAA	CTCATCTTTC	CAGTGGCCTG	CAAGAGCCTA	TGCTATCCGG	TGTCTGACCT	35340
CATCTGTTGT	TCCTTTCTCC	CTCCCTTTCT	TGGCTCCAGA	CGCACTCTGG	TCTCCTTGCT	35400
GTTCCTTGAA	TACACCAGGC	ACACTCTCTT	CGCCTGAAAC	ACTTTACCCC	AGATATCTTA	35460
		PRAITS	TITUTE SHEET	(Rule 26)		

GCTTACTCTC	TGCCTCCCTC	AATTCATTGA	TGAAATGTCT	CAGTGAAGTC	ТТСТСТСТСТ	35520
CCTCTGTAAA	AGTATACTCT	CTGTTCCCCT	TCTTTACTGT	TCTAGCTACT	ATTGCTGTGT	35580
AACAAATCAC	TCCCCAAATT	TAATGAGTGA	AAACATCAGC	CATCATCTTA	TTTCTCACGG	35640
TTTCTGAGGG	TCAGGAATTC	TGGAAGGGCT	CAGCTGGGAG	GTTCTGGCTC	ТАТААТСТСТ	35700
TATGCAGTGA	GAGTCAGATG	CTGGCTAAAA	CTGAAACAAA	GCAGGGTTCT	AGTAGCTGAG	35760
GGCTGGCTGG	GTCTCTCAGA	TATAGTTCAG	ATCTCCTCCA	GGGGGTCTCT	CCACGTGGGC	35820
TAGTCTGAAC	TTCCTCACAG	CATGGTGGCC	TCAGGGCAGT	GGACTCTGCA	TAGTGGCTGA	35880
AGGCTTCGCA	GCTGAGTATT	CCAGCAAGCA	AAGTGGGAGC	TGTATTGCCT	CATATGACCC	35940
AACCTTGGAA	TCCACACAGC	ATCACTTCCG	TGTATTCTAC	GGGTTGAAAA	GTCACAAAAA	36000
CCAACCAGTT	TCAAGGAGAA	GGAACAGAGA	TCACATTTCT	CAATTGGAGA	AGGGTCAAAG	36060
TCACATTGTA	ATCAGAGCCT	ATGGGATACG	AAGTATTGCG	GTCAGGTATG	AAAAATTTGA	36120
TTTGCTGCAT	CTGCTTTACT	TTCTCCACAG	CGTTCATGAT	CTGCTTCTCA	CATGATATTG	36180
ACTTACGTCA	TTTCTGCGTT	TCCTGTCTTC	CACACTAAAA	TGTCAGCCTG	TTTTGTTCAC	36240
TGCTGTATCC	CCAGAGCCTA	GCACGGAGCC	CAGCATGTAG	TGGTATCCAA	TAAATACTTG	36300
TTGCATGAAT	GAATTCTGTC	TTTTAATCCT	AGCTATAGGT	TTCTAAGTTA	AATATTACTA	36360
TAATCATCTT	ACAGACGAGG	GAAATGAGGC	TCAAGAAGAT	TTGGTAACTT	ATGCGGGATC	36420
ACTCAGCCAC	ATAATGGAAG	AGACAGCATT	GAAGTACACA	TGCTTGCTCT	GTCTGCTCTT	36480
CCAAGCTGCT	CATCACACAG	CTGCACCTCT	GAGGACTTCC	CTCCCCAGTC	CACCTCCACC	36540
CTTACCCAGA	GACACACATG	GCCACAATCC	ACTAGCAGAC	CAAAATTCAA	TTTTTCCCCA	36600
GTTGGTTGCA	CTCAAGCTGA	GAGCAAAGCA	ATTGCACTTT	AAATCCCCTT	ACAGCAGATA	36660
TTTCAGAGCA	TGTTCGGAAG	AACCCATCAC	ACTTGGCTTT	TAGATCTTAT	TTCTGGTTTG	36720
TTACAAAAAC	ACAATTAAAT	GAAAGGTTAG	GTAGCTTTTG	AATGGCCAGC	TCAAAGTTTT	36780
GGCTTATTTT	TGCCTTGCTG		CATTTTACCA		CTATTTCCCT	36840

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TAGGGAACCC TTAGATCTGT GATATTTGAA ATAATAAAGC CTCTCCATTG GCCCTTTAAA 36900 AGGTTTGTGG TAAAACCACA CCATTAACAT TCACAGTTCC TTATTTATGA GGCCTGATTG 36960 CACTTATTTC CATATTTCTC ACTGTTTCTC CGATGAGGAT TTCACATAAT AGTGTTTGAA 37020 GGCTAAAGAC TTCAAAGCAG ATTCTTTACT ATTTTTATCT TGAAAAATAT TCAATATTTG 37080 TGTAATTAAA GTGAAGTCTT CCTAGAGAAA ATGACACTC AAATAATCTT AAATGTACCT 37140 CCAAGAAAA AGCTGTCAAA GTGACATTTA GTAATAGAGT CACATTCTCT AAGGCCTTTG 37200 CTTCTCCTTC TGATTCTTAT CATCTTTGAA GGTTATGTCA TGGGCTGACT TCAAATCAAC 37260 TTTTAAAATT ATTATGGCCT TCTTTAAATG TGAGTTCTGA AGGTGAGGGG CTTTATCTTT 37320 CTTTTGCTCC AGATTTTTT TACCGCGTCA TTACCAAGCA TCTTAAAACA AAACCTAAAA 37380 ACAAAAATCT TCCTTGACCT GGTTTTTCCC ACTAGCTAAC ATCCTATTTT TATCTTTCCC 37440 CTTTGCACTA AAGGTTTTTA AACGGATCTT TATACCCTCT GTCTCCATTT TCTCATCTGC 37500 TAACTTATAT GGCAAAGATT ACCACTGCCT TTCAACATAA TTGGCCAATC TACAGAAAGT 37560 TTTCAAGTTC TCTTTTTAAT TGACCACCTC CTGCCTACCT CCCCACCTTT GACATCTTGC 37620 TTCTCACTTG GCACCTTACC CAGTGTTCAA GATTCCCTCC TTTAGGATGT CTTCAGAGCA 37680 GCTACACAGT TGGTACTATA ATTTATACAT CCTTGTACAC AGGGCTTGCT GGGATATTGA 37740 TGGAGAGAG GAGGAAACTG GAAGTAGTTC AGGCCAGAGC TAGGGAAATT GACCCATCTC 37800 CAGGTCTCAG GTCTGCAAGG GGAGCTCACA GCTTAACACA TGGAGTCTAG AAACTTGTGC 37860 TGGACCTTGA CCAACACCAG CCCATGGAGT CCAATACAGT GCTCAATAGG GATTTCCAGG 37920 AAATTGCTAT ATTTATTCAA AGAGAACTTA CCAAGTGTCA GCTACGTGTT GGGCATTGTG 37980 CTAGGCACAG GGACCACAAA GATAAGACAT TGTAGCTTTC CTTAAGTTGC TCACTGAGTA 38040 AATAGAGAGA CAGAAAGGTA AACAGGTAAG TGCAAAAATA CATACAATTC AGCAATAGTG 38100 TTCATAGTGG CTATGGAGAG AACGCTCACT AACTTTGTTT AAACAGTTGT TCTTTCAAGG 38160 ATTTGACATG GATTTGATTG GAAAAGCATG ATACCATTTT TTGCAATTAA ACACAGGAAT 38220

АСАТАААТАА	AATGCATCAG	TATTTTTAC	AAATAGCTAC	TAAGAGCTAC	TAGAAAACCT	38280
GGGAATTCTT	AAAACCTTAC	CATGCTACTT	GCTCTAAAAT	ATTTTATTTT	ATGTTATTTT	38340
GTACATTTCT	TTACCTACAC	AAACACCACT	GTTTTCTTCA	TTTCTTAGTC	ТАТТТАААСС	38400
TCACACCCTT	TCAGCATCTC	TTAATTATTT	ACTACCATCT	GTTAGTTCTC	CTGTCCTGAA	38460
TGAAACAAAA	ATGGCAGAAT	GTAAAACGAG	GGCGAACAGA	TTTTTGACAG	GAAGTATTCA	38520
GAGGTAGAAG	GAAATAGTCA	AGACACATAT	GATAAACGAA	ААСААТААТА	ACTTTATACA	38580
TAACAACTTA	TAGACACATT	TAAAAAGTTT	AAGATCTCAA	GAGCTATGTC	TGAATAGATA	38640
GGAGTAAAAA	CTCTATTAAG	TAATTAGGAA	AATAACAAGA	ACAGTGAATT	TCTTAATGAA	38700
TGGCATGTAA	TCAAAACTGT	ACTTATCGTC	TAATTCATAA	TCTTGAATGT	TTTTATTTTA	38760
TTTATTTATT	TTTTTATTT	TTGAGACAGA	GTCTTGCTCT	GTCACCCAGG	CTAGAGTACA	38820
GTGGCGTGAT	CTCAGCTCAC	TGCAACCTCC	ACCTCCCAGG	TTCAAGCGAT	TCTGCTGCCT	38880
CAGCCTCCTG	AGTAGCTGGG	ATTACAGAGG	CCTGCCACTG	CACCCGGCTA	ATTTCTGTAT	38940
TTTTAGTAGA	GATGGGGTTT	CACCATCTTG	GCCAGGCTGG	TCTTGAACTC	CTGACCTCAT	39000
GATCCACCAG	CCTTGGCCTC	CCAAAGTGCT	GGGATTACAG	GCGTGAGCCA	CCACGCCTGG	39060
TCGAATGTCT	TTATTATTTG	AAGAGACAAC	ATGGGCCTTA	AATCTGTCTT	CTATTTGACA	39120
GACTTTGATG	GAGTCAAATC	CCAATGCTGC	CACTTACTGA	ACGGCCTTAA	ATGACTTAGT	39180
CTCTCTCAGC	TGTCTTTCTG	CATATGTAAG	GTGGAATAAT	GATGGCTTTC	AAGGAGGAAT	39240
AAACCTATGA	AAAGTGTTGA	GGATAGTGTT	TGATATGAAA	TAAGGATTTC	AACAAGTAGT	39300
AGCTGCTATT	GAAGATTTAA	GAGTTATTTA	TTACAACTAT	ТТААТАААТ	ттталаласт	39360
AATACACTTA	AATTATTAAA	GAGCTTTGAA	ATGGGCCAGG	CGCAGTAGCT	CCTGCCTGTA	39420
ATCCCAACAC	TTTGGGAGGC	CAAGGTGGGC	GGATCACCTG	AGGTCAGGAG	TTTAAGACCA	39480
GCCTGGCCAA	CATGGTGAAA	CCCTGTCTCT	ACTAAAAACG	CAAAAATTAG	CCAGGTGTGG	39540
TGGCATGCAC	CTGTAGTCCC	AACTACTCAG	GAGGTTGAGG	GAGGAGAATT	GCTTGAACCT	39600
		CLIDS	TITLET	r (Dula 26)		

AGGAGGTGGA	GGTTGCAGTA	ACCCGAGATG	TCACTGCACT	CCAGCCTGGC	AACAGAGCAA	39660
GACTCCATAA	AGACAACAAA	AGCTTTGAAA	TTGTGTAAAT	GAGTTGTACC	TATCTTCATT	39720
TAAGAAATTC	ATCTTTGTTC	ATTTATTTT	ACTTGACATG	AGAGCTTCCA	GCAATTTTTA	39780
ATTAAGCCCT	CACAGATTTT	ATGTCACTGG	CTATGTGATA	AACAAATTAT	TTGCTAAAAT	39840
AATATTCTTG	CTTCTTTTTT	AAGGAATTGT	CTCCCTAGAA	ACGGTTTGTA	CCAAACAATA	39900
CACTGACTTT	ACACAAAATC	AGATCTGATT	GGCAACAGTT	GCAGATGTTT	TCAAAAGATT	39960
TTCATTTGAG	AAGGGGCCCA	TTTGGGTTAT	TTAGATTCTA	AGAACTGAAA	CTGCTTTGTT	40020
СТСТТТТТСТ	GGCTTCTGGG	AGAGGAGGAG	ACATGAATTC	AGTTAGCACC	TTGGTATTTT	40080
CTTTATCCTT	CATTTCAATA	CAGAAGATGC	TTCATATGCA	CAGTGGTGTC	AGGTCACATC	40140
AAAAGAAAGA	GAAACAGTTT	CTTGGTTTTT	AATTTTCAAC	CGGAAAGGAA	AGGCACCCAT	40200
TTTGTTCCGC	TCTAATTAGC	CAGTGCATGA	CTTAGAGAGC	AGGCAGATGC	TTTGAAGGCG	40260
TGGTAACACA	GGTCTTCATT	AATCTCCACG	CAGGACTTGC	ACTTCTACTA	TGCCTAGGCT	40320
GAAGAAAATG	GCTCAGGAAG	ATGAACAATC	TCACAGAGCC	СТААСТААСТ	GAAGCCAGGT	40380
GTTATAAAGC	ACAAGTCAAG	AGGGTGAGAA	ACTAACGTTC	TTGAAATCTC	CCACTTCTTT	40440
CTACGTCAGA	AGAGCCAAGC	TGATTATTTT	AGTTGGAATT	TAGAAATTTT	ТАААААТТАТ	40500
TCTAAAGTCA	TGAACAAGCC	ТААТТАТААА	GATAGTTGCT	GTGAAGGTGC	TGAAATAACT	40560
CGATTTTACC	AACCCCCTCT	TCTGGAGGAA	GCCATAATGG	AATCCTGTAC	AATGTTCACT	40620
CTACCAACGA	ACTCTTGTTT	TTCTAATGAG	GAAACAGAGG	CCCACAGTAT	TAAACTATCT	40680
TAACCAATAC	AAAATGACTA	GTGCTCTGGT	ССТТТТАТТА	AGCACTAAAA	TTTTGATCCA	40740
АТААТАААТС	TGTCCATTAG	AAGGAGTTTC	CCTAATGTAC	TGGTTCTAAC	TTGTTCCCTT	40800
CAAGGGGCCA	GTGTCCCGTA	CACATAGCTA	AATGGGACTT	CTCTTCAACT	ACCATTACCC	40860
AGAGGGCAGA	ACCTAAAATG	CTGTGAATGA	CATTCTGCTG	TTCACATCTC	AGCAGCA	40917

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(2) INFORMATION FOR SEQ ID NO:3b:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 39678 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3b:

GTGTTGCATT	TGAGCTTCTG	CAGGGCCACC	CAGGACCTAT	ATCTGCTCAG	ATGTTTAACT	60
CATCTAATTC	AGTGAACACT	TCATTCTAGT	TAACTGAACA	TCTACTTTGT	ACAAGGCACT	120
ACAGCGGTTC	AGAGATGAAT	AAAATCATGA	GATTCCACTG	TCTCCTATAA	ACCATCACTT	180
TGGGAAATTT	TAGAAATGTG	GGTAAGCTCC	AGGGCTTCCT	GCAGCGTAGA	AGTCACAAAC	240
TCAAATGCCT	GCAGAGGCCC	AGCTGACAAC	ATAAGTAAAT	GATTCTGGCT	GGGCGGAAAA	300
CAATTACGGG	TGGGTGGGTT	TCCAGCTGGG	GAGTGCACGC	CTGTGTTAAA	GGACAGCTGC	360
TACTCATTTC	CAGCCAACTG	TGTTCCCATG	TAGAACTGCG	GCCCAGTGTA	GCCAGTACCG	420
AAGATTTCTC	AGAAAAAGCC	GGAGATCTCA	ATGTTAGTGT	AAAATCTCTC	AAATTTCCAA	480
GAGGATTATA	TGGGGCAAAG	GTTCTCAGAT	CAGTTTGCAG	TCTCTTACTT	AGCCCATGTG	540
CAGAGCAGTC	GTAGAGGGTA	GCATGCAGTG	TCCTACATAA	TAATTCTTTT	TTATTTTATT	600
TTATGCCTTC	CTCCTTCCTG	TCTCTCTTTA	ACCTTTCTTC	TTCCCTCAGG	CTGGCTTCTT	660
CCCTCAGCCT	CGTCCGACCC	CAGCCTGGGT	TCAATGAACA	TTCGGTAAAG	GAACACGGAA	720
TGTCAAGCGC	ATTAGAGACA	ACCTTGAGAC	ACATTCCTCT	TGCGGTAAGC	ACTTCACTGT	780
AGATTTTTAA	TTTTAAACAA	GACAATGTTT	ACGACTTGCT	TCTTTCAGGG	AAGAGCGATA	840
TCAATTTTAG	TGAACACTTC	AAGGCTGAGA	TACGCTAGGA	GAGTCGTGTG	GTGTTGCACA	900
GCAAAGAATT	CCACTTTGAA	GCGAGTGGGA	AAAAAAGCAT	CAAATGCCAC	ATGTAACTCA	960

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CCGCCTGAAG	GGTTACATTG	GTATGAAACC	TGGGTTTAAA	AAGGGACCGA	ATAGACTAGC	1020
CATTAAAAGA	CCTGCGTACA	ACCTCTCTCT	CTCTCTTTGA	GAGATAATGT	ATCTGGACAA	1080
TAAACATGAA	CAGAGTGGAG	TCTATCCTGT	ТТААААСАТТ	GCCTACTGTA	CAGGCACCAG	1140
GAGCTGAAGG	GTCAGAATAT	TAGCAGTGGG	AGCTTGATTA	GAGTTGATGA	GAGATGGGTA	1200
GTAGGAGGAA	AGAGTGAGAT	AGAGGAAGAG	GACATGGGGG	TTACCCATAA	GTGGAGAGTA	1260
GAAAAGTAGA	ATCAGCTGGC	CATCAAAGGG	CGTGGGACTG	AGGAACAGTA	TGGCATGTAT	1320
ТАААТАТАСТ	AAGCGCTGAC	ATTGGAGGAG	AACTAGGAAG	TTAAATGAAA	TCAATAGGGG	1380
ATGATGGAGA	ATAGTTAGGT	GTGCAGGGAT	TAGGGTTATG	ATAGAAATAC	ATGTGAATAC	1440
ATGCAGTATT	GTCCTGGAAA	ATGGTTAACA	GTTGGTTCTC	CTGGGGGGTG	AGGGGAAGCC	1500
CTGATTTGTA	ATATTTGCCT	ATTTCTGTGG	TGCAAATACT	CCCACCATGA	CCAGTTTCAA	1560
GCTATGAATG	TTGAAGTCAC	AGAAAGCAGG	TTGGGAGGAG	ATGCGCACAT	TTGTTCCCCG	1620
GCAAGGTGGA	AGGTAAGGAA	GGTGAAATCA	ACAAGGTCAA	AGAAAACTCA	AGATTTCGAG	1680
GTGCCTCAGG	TCTGAGGGGC	AATGAAGTCT	AGGAATGGCT	GTGCTGAGGT	AGCTGAAATA	1740
GAAGTGACTG	CAGAGGTCAT	GAAGCTGAAG	AGGTGAAAAC	AGAAATTAGA	AAGGCAAACC	1800
CCCACCGCCC	AACCCCCACC	CCTGCAGCCA	GTTTCTGAGG	GTGACAATAG	AGGAAAGGGT	1860
GGAGATGGAG	TTCAGGTCCA	GAAGCCATAG	AAGCGAGTGT	GACATTGTGC	TCAAGGTCAG	1920
CACATGTCAG	TGTGGGGTGT	CACATGCTGT	TGTGAACCAT	CATTTATCAC	CAATTATGGA	1980
AGACCTCCTA	TGGGCATCTT	GCCATATGCA	TTATAAAGAT	GTGTAAGAAG	ACATTTCCCT	2040
CCACTTGGTG	AGGAGAATTA	GGGCTGTACA	CAGATACTGT	AGAGTGCCAT	GTGCCTGGTA	2100
CAGATAAGGT	GTGTTAGAGG	TTAAAAGATG	AGGCTCTTAA	TATTAATGAT	AGATCCCACT	2160
TACCTGAGTC	TGACTTACAA	TGTGCCTAGC	ATTAAGTGTT	TTACCTGCAT	TCCCTTTGAC	2220
GTTCAGAACA	ACCCATTTTA	CAGATAGGGA	AATTGGGTCA	GAAAGTTTCA	GTAACTTATC	2280
CAAGGTCAAC	ACAATTGGCA	AGTGCCAGAG	CTGAGCCAGG	AACTGAGGTC	CTTCTAACAC	2340
		SHIRS	TITUTE SHEET	(Rule 26)		

CAAACAGCTT G	TCTCCCCAA	TCACTGTGCT	ATTTTCCTCC	CCCAGAAGAT	AATACTCTGA	2400
TGGAAATGAA G	GATAGTGTA	ATAGGAGATT	CGGTGTTCCT	ТТТТТТАААА	AAAATTCAGC	2460
TTGCATATTC C	TAAAGAGTC	AATTCATGTT	ТАААААААТ	TTCCCTTGTG	CTTGCATGTG	2520
ACATGTATTT I	TAGGATCTG	CTGTTAGCAA	GTGTATTTTT	GTGTGATTGA	GTGGGAGAGT	2580
GGGAAAAGTT I	TTGCAGAGCT	GTTGAAGCCA	GAATGCAGGG	GGGCTGCGCA	GCAGAGACTG	2640
таааатстст с	GCCATCTCAG	GTCTTGGAAC	AAGCACAAAG	AGATGTGTTC	TCGATTTATT	2700
ATTCTATGTA C	CATCCCCAGA	TGAATGACTA	GTTAAAGGTA	TTGTTAAAGC	ATTTTAAATG	2760
ACCCACTTCC A	AGCAGCGAAC	AAAATCACTT	GCTGTGCCAA	GCCAACTGGC	ATTTCTGAGA	2820
TGATAAAACC A	ACAAAGTGAG	GAAAACGTTA	AAACTGCTAA	AGCAAAAATG	ATACACAATA	2880
ATGGAGAAGG A	AGAAAAATTG	AGCTTTATTG	TCTGCCTAGG	CAGATGGCTG	ACCACTAGGT	2940
GGGCCTCGGC (GTCACGTCCA	GGGTAATTGG	TTGCTGGGGT	GTTTCTGGCG	AGGAAGATTC	3000
ACGCTTCAGC	TCGGTCCACA	AGATCCTGGC	TCATTCTTTC	CTAGATTCCA	TTTTCTGCCT	3060
CCTCTCCATG A	ACTGGGTCTG	ATGGTTGATC	CAAACGGGCA	ATTGAAATCA	GAAGGTTACC	3120
TTTACCTTAA	AATGCTTTTC	TGGAAATAAA	AGGACATGAA	AAGTAACTAA	GGACCGGATT	3180
TCCTAGCCGT (CTTTCTCTCC	TGCATGCGCA	ATTTATCCCC	AGATATAAAA	TTGCCTGCTT	3240
TGATAATTAT	ACCCTCTAAA	TGAGGGGCAA	GTGGCTAATT	ATGCCCACAT	GTGGCCGATT	3300
GCACTCCCCA '	TTAGCCAATT	ATGTGCTCAA	TTATTTGTGC	ACATGAATAA	TTGCACTCAT	3360
GGAAAATAGC	GCCCTCCTTT	CAAATCCTCG	TGCTTGGAGT	GGCTGATGGA	GTAATTGTCA	3420
CACTGGAAAT	GCACTTGGTG	GGGAGGGAAA	GAGTATCAGA	TACCAGGAAA	CGCATAAGTG	3480
ACCAGAGCTC	GCAGATGTTC	ACTGCCACAA	ATGGCCTTAG	GAGCCAGAGA	GAGCGGGAAG	3540
GACCACAGGA	TGGAACGGGC	CAGCCTGTGA	GTTAGGAAGC	CTGCTTCTGA	AGTTGCCTGG	3600
GCAGCTCATG	TGCGGTGACC	TTGGGCAAGT	CATTAACTTT	CCTTCAGGTC	TAACTGGTTC	3660
TGCATACACA	ATGAGGATGG	TAATAACGCC	CAATTCCCAT	CACTATCGTG	GGATGGATCA	3720

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GACTATTTAA	AAGGATTTAC	AATCTGCTTG	GGTAAAAGCT	TTACATAAAT	ATGAGGCATT	3780
ATCATGTCGC	TTGGTACATC	TCCAATTATG	AAGGAAGGGT	AATGACCCTC	CACAGCAATG	3840
CAGGACTCCT	GGTTTGGAGG	GAGGGAAAGT	TTGAGAAGGA	CAGGAAGCTT	GTTGCCCCAG	3900
CACTGATGTT	TCTACTGAGG	TACCAGAAAA	TGTCATGTGG	TCATACAGAA	TTCATTTATT	3960
CATTCAACAA	ACATCTGTCA	ATTGTTACAC	TGTCCTGAGA	ATTTGGAAAA	ATGATGAAAG	4020
ACTCAGTCCT	GCCTTAGGAG	GTCACTGGCA	CATTGGCCCG	GGCCCCTGTT	TTGGGCCTTT	4080
TACTCTGACC	TGTGCTGATT	TGCAAATAGT	GGGAAATTTT	ATCTCAAGTC	TATGAAATCT	4140
GGCATGCATT	TTCACGGTTT	GATTGCCAGG	TACATTCGAT	GGCAATGAGT	CTTATAATGT	4200
TTGGTTACCT	TCATTTACCT	AAGAACTGTG	GTTGTTGCTG	TGGTTGTTGT	TTTTGTTGTT	4260
TTTGAGACGG	AGTCTTGCTC	TGTCATCCAG	GCTGGAGTGC	AGTGGCATGA	TCTCCGGTCA	4320
CTGCAAACTC	CACCTCCCAG	GTTCAAGCGA	TTCTCATGCC	TCAGCCCCCT	CAGTAGCTGG	4380
ATTACAGGCG	CGCACCACCA	TGCCCGGCTA	ATTTTTGTAT	TTTTTGTTCG	GGACACAGAT	4440
TTCACATGTT	GGCCAGGCTG	GTCTCGAACT	CCTGATCTCT	GGTGATCCGC	CTGCCTCGGC	4500
CTCCCAAAGT	GCTGTGATTA	CAGGCGTGAG	CCACTGTGCC	CAGCCAGAAC	TGTGGTTTTA	4560
ATGACAATGC	TAAAAAGTGG	TATATGTCAC	AGTGTCGGGT	GGGGCTAAGA	GGCACATTGC	4620
TGCAGTGATC	CATCATTCAT	TTCCCACCAT	TCTCGCCTGG	ATTAGCGCAG	CAGCTCCCAG	4680
AGAGGCACCT	CACTTTGACC	TTCTTCCTCA	AAGACATTCT	CTGTGACCTG	CCTGGCCCTT	4740
ATTACCTCTC	TAGCTTTGCC	ACTTCCCTAT	GTCTCCATCT	CCCCTCTCAC	ACGTAGTAGA	4800
AAGAGACTCT	ACCTCATGGA	GTAAGGAGAG	GCTTCACAGA	GGCAGGATTG	CTATTAGTCT	4860
TCAAAGATGA	GGTATTTGCT	AAATGAATGA	GACAAAGGGA	TTGGGGCCAC	ATTACAGGGA	4920
AATTGAGGTA	TGTAATAGCC	TGGTGCAGGT	TAAGAGTGTG	GACTCTGAAA	CCAGACTCAG	4980
CCTGGAATTG	AATCCTGGCT	GTGTGATGTT	GGGCCAGTGA	CTTAACCTCT	CTGTGCTTTT	5040
ATTCACTCTT	СТАТААААТС	GGGATTATAA	TAAACCTACC	TTATAAGGTT	ATTATAACAG	5100
		20112	TITITE SHEET	(Rule 26)		

TCAGTAAATA	TAAAAATAGA	AGTTTTTGGA	TGATGACTAT	CACATCAGTA	AACACTTGTT	5160
TGCCATTATT	ТТТАТТАСТТ	GACTAAAAAT	ATACCAAAAA	GACCATCCAA	GAAAACCCTT	5220
TAAGCTGCTA	GTGCAGAAAG	ATTCCCCTTG	TGTTTGTGTG	CTGGGGGGTC	AGTGGTGCCT	5280
GTGGCCCACT	GGAGAGGAGA	CAGCTATGGC	TGGAGTGATT	CTCAAACTTC	AGAATGTCTA	5340
AAATCATCAC	ATGGACAACT	TATTAAGGAA	AGCAAATGCC	TGGGCTCCAT	CCTCAGAGAG	5400
TCTCATTCAC	TGGGTCAGGA	TAGAGCCCAG	GAATCTTTAC	CTTAAAGAAC	CATCCCACCT	5460
СССАССТСАТ	ATGATCCTTA	TGCAGGTGAT	CTGGGGCCCA	CACTTTGAGA	AATAGACTCA	5520
GGTCAAAGTG	GCTCTAACTG	CATCTCATTT	CTTACCTGGC	АТАТСТААТА	GTAGAGAAGA	5580
AGACAATGCT	AAGATTTTTG	TTGGAGATCT	TTTGCTGGGA	TTGCTGCTTC	ATTCATTCAC	5640
TCATTTATTT	ATTTATTTAT	TTATTTTGAA	ACAGAGTCTC	ACTTTGTCAC	CCAGGCTGGA	5700
GGGCAGTGGC	ACAATCTGAG	CTCACTGCAG	CCTCAGGCTC	CTGGGTTCAA	TCGATTCTCT	5760
TGCCTCAGCC	TCCCGAGTAG	CTGGGATTAC	AGTCATGCAC	CACCACGCCC	AACTAATTCT	5820
TGTATTTTTA	GTAGTGACAG	CGTTTCACCA	TGTTAGCTAG	ACTGGTCTCG	AACTCCTGAC	5880
ATCAGGTAAT	CTGCCTGCCT	CGGCCTCTCA	AAATTAGTAG	CTGCAATTAC	ACGTGTGAGC	5940
TGCCGTGCCT	GGCCTGCTGT	TTCTTTTAGT	TGGGCCTCTT	CTGTAATAGA	GTGTGAGAAT	6000
TCTGACTTGC	TGCAACAGTC	TGCTTTGAAG	CAGGGCTGTG	TTTACACTGG	TCAGATGTGG	6060
AATTGTGGGG	CACACTTAGC	AGCTTCCTTC	TCTAATTTTT	CTGTATTTTC	AGGAGAACAA	6120
ТТТТАААААА	ТТТААТАААА	ATGCCTTAAA	AATTAACATT	ATTATAAGAT	GAATCCCATT	6180
TTTCTAATCT	TGTAAATTAA	AAACAATCAT	AAGCATATGA	GCACCTGCAC	TTAGGGAATC	6240
AAGGTTGGCA	AAGCTAAACA	CTTCCAGCTC	TAGGTGATTC	GCGGCAATAC	AAATGGAGCT	6300
GGACTTTGGC	CACAGTGCAA	AAATATTGAT	CTGTTGTTAG	ATGCTCTGAA	GTTTCCAGAA	6360
AGAATTGGTT	CTGCCTGCTG	TGCTTCAGTG	CTTAAGGGAA	GTGGTTCCTC	AAAATGTTAG	6420
TTTTTAAGCC	CAGCTTTCTT	AAATAGGAAG	ATTCTAATAG	TAGCAAAAT	ATAAACTGCT	6480
		STIRS'	TITUTE SHEET	(Rule 26)		

TCTAGGTTTA	AAAAGGACCC	AGCACACAAT	GGTTATCACA	CACCTTTCTC	CTCAGGTGAT	6540
GAGTGGATGA	GTGGCCTGGT	GTATTTCATA	ACATCTCCCA	GGTCCAAATG	CTAAAGCAAT	6600
TGCTGAAAAG	ATACCATGTG	TACCGGAACC	TTGCAGAGGT	ATTTTGTTGG	CATAAAAAGA	6660
AATATTGATC	ATCTATAGTA	AAAATGGTTC	ТАСТТТААТА	CTACTGAGAA	AAGATTTTCT	6720
TTTCCCAGAT	CTACATCCTG	AATCTTCATG	AAGACAAGAT	CCCCTAAACT	TCCACTAACA	6780
CCATAATGTG	TGCTGTCCTT	TGTAATGTAG	TCCACAGATC	TCATAAACTG	TCAGAAATAG	6840
CAGAGATTGT	AAGGTCATCC	ACTTCCCCTG	TAAGGCCTGC	GTCCCTCACT	TACATCCCTA	6900
ATAACGTCCT	CTAACCTCTG	CTGGAGGGCA	GATTTAGCTG	CCAGCTGGGA	AGAGCTCTGC	6960
CCTAGTCAAC	ATTTTTATCT	GTGGCTTTCA	GATGAGAACA	CTGGATGCTT	ATCTGAAAAA	7020
AGCTCCTCAG	GCTGGAGGGA	GGGATTGGCT	CTAACAAGAT	GCAATGTGAT	AAGAATAAAA	7080
GCGAAGCCAA	ACTCTAGGCC	CAAAGGCTCT	AGCAACACAC	TTTTGAGAAC	CTTGGAGACG	7140
AGTTTTGGCT	GATGCGAGCT	TCTCCGCCTG	CTAAAGTAGC	CCATTCCATT	TGGACGGCTC	7200
TAGAGGCTGG	CATGTTCTTC	TCCACGTTGT	GTTAATGTAC	TCCAGTTTCT	TCCTGCCATG	7260
AACTGGCATG	CCCTGGCTCC	TCCTACCTTC	CCCACTTTAA	GTCTTCCCTC	CCTCCTTCTG	7320
ACCTTCCCAT	TCCAGCCACA	CTGGCCTTTT	GTCTGGTCCT	AACAAACCAT	GCCTTTCCTG	7380
CCTCCAAGCC	CTACACCTGC	TATCCATCCC	TCTGTCTGAG	AGACACTCCC	ACCCCTTCAC	7440
AAAGCCTGTT	TCTCATCCTT	CCAGTTCAGA	TGTCTTCTCA	GCTTGCCTCA	ACTGACCTCT	7500
TTCAGCTATT	CTCACTCTTT	GTACTCTGTT	CATTTCCTTC	CTGGCAGTCA	CCATAATTTA	7560
TCTTTATTTG	AATCAATTTC	TTAGTTGTAT	TATTTAGTTA	TTTGCACACT	CTGTCTCTCT	7620
GTGCCTTTCT	TATTCACTGC	AGGCTTTCTT	ATGTAAGTAA	TTTATTTACT	TAAATTTTTA	7680
AAAATAATT	CAACTTTTGG	CCGGGCACAG	TGGCTCACGC	CTGTAATCCC	AGCACTTTGG	7740
GAGGCCGAGG	TGGGTAGATC	AGCTGAGGTC	AGGAGTTCGA	GACCAGCCTG	GCCAACATGG	7800
TGAAATCCCA	тстстаттта	AAATACAAAA	ACTAGCCGGG	CGTGGTGGTA	TGCACCTGTA	7860
		CHIDCA	rititre queet	(Rule 26)		

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ATCCCAGCTA CTCGGGAGGT TGAGGGAGGA GAATCACTTG AACCGGGGAG GTGGAGGTTG 7920 CAGTGAGCTG AGATCACGCC ATTGCACTCC AGCCTGGGGC ACGAGAGTGA GACTTCATCT 7980 CAAAAAAACA AAAAACAAAA AACCCCTGCT TTTCAGAGGG GCTGAACTAA TTTACATTCT 8040 CACCAATAGT GTATAAGCAT TCCCCTTTCT CTACAGCCTC ACTAGCATTT ACTTTTTAA 8100 AAAACTTTTT AATAATAGCC ATTCTGACTG GTATGAGATG GTATCTCCTT GTGGTTTTCA 8160 CTTGCAATTC TCTGATGATT AGTGATATTG AGCATTGTTT TATGTTTGTT GGCTGTTCGT 8220 ATGTCTTCTT TTGAGAAGTG TCTTTTCATA TATTCTGCCC ATTTTTTGAA TGGAGTTGTT 8280 TTGTGCTTGT TGAATTAAGT TCCTTATAGA TTCTAGATAT TAGACTTTTG TTGGATGCAT 8340 AGTTTGTGAA TATTTTCTCC CATCCTATAG TTCTGTTTAC TCTGTTGATA GTTCCTGTTT 8400 TGTTATGTTT TGTTTTTTG CTGTACAGAA GCTGTTTAAT CTAATTGGTC CCACTTGTCA 8460 ATTTTTGTTT TTGTTGCAAT GGCTTTTGAA TTTTAATAAT AAATTCTTTC CTAAGGCTGA 8520 TGCCCAGAAC AGCATTTTCT AGGTTTTCTT CTAGGATTCT TATAGTTCAA AGTCTTATAT 8580 TTAAGCTTTT AATCCACCTC AAGTTAATTT TTATATATAG TGAAATGCAG GGGTCCTGTT 8640 TCATTCTTTT GCATGTGGCC AGCCAGCAAT CCCAGAACCA TTTATTGAAT AAGGAATCTT 8700 TTCCTCATTG CTTATTTTGT CAACTTTGTC AAAGATCGGA TGACTGTAGG AGTGTGGCTT 8760 TTTCTGGGTT ATCTACTCTG TTACATTGGT CTATGTGTCT GTTTTTGTAT CAGTATCATG 8820 CTGTTTTTGT TACTATGGTC TCATAACATA GTTTAAAGTT GGATAATGTT ATGCCTCTGC 8880 TTTGCTGTTT TTGCTTAAGA TTGCTTTGGC TATTGAGGCT CTTTTTTCAC TTCATATGAA 8940 TTTTAGAATA GTTTTTCTA ATTCTTTGAA AAATGACCTT GGCAGTTTGA TAGGAATAGC 9000 ATTGAATCTA TAGATTGCTT TGGGCAGTAT GCTATTTTAA TGATATTGAT TCTTCCTATC 9060 CATGAGCATG GAATATTTTT CCATTTGTTT GTGTCATCTA CTATTTCCTT TAGCAATGTT 9120 TTTTAGTTTT CCTTGTAGAG ATCCTCCTAG GTATTTCATT TTTTATGTGA CTATTTTAAA 9180 TGGGATTGCA TTCTTCATGT GGCTCTCAGC TTGAATGTTA TTGGTGTATA GAAATGCTAC 9240

AGAGTTTTGT	ACACTGATTC	TGTATCCTGA	AACCTTACTG	AAGTCATTTA	TCAGTTCTAG	9300			
GAGCCTTTGG	CAAAGTCTGT	AGTGTTTTCT	AGGTATAGAA	TCATATCATT	AGCAAAGAAA	9360			
GATAGTTTGA	CTTCTTCTTT	TCCTATTTGA	ATGCCTTTTA	TTTCTTTCCC	TTGTCTGATT	9420			
GCTCTTCCAG	TACTACGTTG	AATAGGAGTG	CTGAGAGTGA	GCATCCTTGT	CTTGTTCCAC	9480			
CTCTCAGGGG	AAATGGTTCC	AGCTTTTGCC	CATTCAATAT	GATGTTGGCC	ATGGGTTTGT	9540			
CACAGATGGC	ТСТТАТТАТТ	TTGAGGTGTA	TTCCTTTGAT	GCCTAGTTTG	TCAAAGGCCT	9600			
TTATCATGAA	GGGATGTTGG	ATTTTATTGA	AAGCTTTTTC	TGGGTCTTAT	TTGGTGAATT	9660			
GCATTTATTG	AATTGTGCAT	GTTGAGCCAA	ACTTCCATCC	CAGGGATTAA	ACCTACTTAA	9720			
TCATGGTGTT	AACTTTTTGA	TGTGCTGCTG	GATTTGGTTT	GCTAATTTTT	TTTTTTTTT	9780			
TAAGATGGAG	TCTCGCTCTG	TCGCGCAGGC	TGGAGTGCAG	TGGTGTGATC	TTGGCTCACT	9840			
GCAAGCTCCA	CCTCCCGAGT	TCATGCCATT	CTCCTGCCTC	AGCCTCCCGA	GTAGCTGGGA	9900			
CTACAGGCAC	CCGCTACCAT	ACCCAGCTAA	TTTTTGTATT	TTTTAGTAGA	GACAGGATTT	9960			
CACCATGTTA	GCCAGGATGG	TCTTGATCTC	CTGACCTCGT	GATCTGCCTG	CCTCAGCCTC	10020			
CCAAAGTGGC	TAGTATTTT	ТТААТТАСТА	TTTTTTCTCA	CCCTTGCTGC	CATCTTATGA	10080			
TTTTCTAGTA	TTTTGTTGAA	GATTTTTGCA	TCTATTTTCA	TCAGGGATAT	TGGCCTGTAA	10140			
TTTTCTTTT	TCATTTCATC	TTTACCACAT	TTTTGTATCA	GGTTCATACT	GGCTTCATAG	10200			
AATGAGTTCA	GGAATGGTCC	CTCCTCCTCG	AATTTTCTCT	GTAGAATTAG	TACCAGCTCT	10260			
TTGTGTGTCT	GGGAGAAGTT	GTATGCCAAT	AATTTAAATG	CAGTTAATAT	TTACTGGACA	10320			
ATTTCCTCCA	GATAATTGTA	TATGATTTTT	GGTCCACCCT	GAGTTGATAC	ATGTATTTTA	10380			
ATTGTATCAT	GGTATGAAAA	GAGCAAGAGT	TATTTGGTCA	CCTAGTCTTG	CCTATAGATG	10440			
TTGCCTAATG	ATTCAAAGTA	GATATTTTGG	GAGCCTTAAC	AGGTGCCGTG	GACTAGGCAG	10500			
TTTTGTTTT	TTTTTTTTT	GAGGGACAGA	GTCTCGTTAT	GCTGCGCAGG	GCTGGAGTGC	10560			
AGGGGCATGA	TGTAGGATCA	ATGCAACATC	CGCCTCGTGG	GTTCAGAGCA	ATTATACTGC	10620			
SUBSTITUTE SHEET (Rule 26)									

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ATCAGCCTCC	CCAGTAGCTG	GGACTACAGG	CTCACGCCAC	CACGCCTGGC	TAATTTTTGT	10680
ATTTTTAGTA	GAGATGGGGT	TTCACCATAT	TGGCCAGGCT	GGTGTTGAAC	TCGTGGCCTC	10740
ATGATCCACC	CGCCTCGGCT	CCCAATGTGC	TGGGCTTACA	GGCGTGAGCC	ACCGCACCCG	10800
GAGATTAGGC	AATTTTATAT	TCCCAAATAT	CCAACTCTTC	TGACCCGCTT	TCTCAGCCTG	10860
GGTGTATCAG	GCACAAGGCC	TGTTCAGATT	ATGTGGTCTC	TGAAGATATG	GCTCTCCAGG	10920
GTTGACAATG	TGGATAAGGA	TTCACCTGGT	TTAGGATTTA	CACATTCGCC	TTGAATGTCT	10980
GTTGCACCAA	GTAGACAGTC	CATCCCAACT	TGGCCATTTG	GTCAGAGCTG	TAAGGAGACA	11040
AGGAGGTGGG	CAGCCGCTGC	TGTGAACTGC	TTGGACAAAG	ACTGCCAAAT	AGCTATCAGA	11100
CAGTGTTAAC	AACAGCTGAT	TTAGGTTTGA	AGGGGGCAGT	CTCTTGGGCC	ACTTACTATG	11160
CTGCATCATC	CTCTTTGGAA	AATGCTCTTC	AGGTAACTGC	CTAACAGACT	GAGAAAATAA	11220
AATGCTCACA	GAGAAAAAG	ACCCGGAAAG	TCTGACTTCT	CAGAGCTCAG	TGTTTAGGTG	11280
CAGAACTGGA	TTGTGAAAGG	АТТТТТАААТ	TTTTTATATT	CATTGCAGGG	AACATTCATT	11340
TATTCCATCC	TTCTCCACTC	CCACCTGTCT	GTCGTTGTCT	TTGTCTCTGT	CTCCCCACCT	11400
CTCTCTCTAG	ACACACACAC	GCACACACAC	ACACACACAC	ACACACACAC	ACACACACAC	11460
ACACACACAC	ACACACACAC	ACACACACAC	CCCTATTCAT	TGCCAACAGT	AATAGAGTTG	11520
СТТСТТТАСТ	TCTTGGAGAG	AAAAGCCTCA	ATCTGAGGAA	GCTGTGCTGA	CTAGCCTTGC	11580
ТСТТААТСАТ	GGAGACAATG	CTTTATGCCT	TTATCTTTGC	ACAGCTGAAA	GCCATGGCAG	11640
AAGCAGTCCT	CTAAACGAAA	TAAAATAGAA	AGGTTCCTGC	TAAGCCCTGG	CAAATGCAGC	11700
CTTCTATCCC	TCCCCCAACA	CTCACAGCTT	CTGAGCAAGA	TGTTGCTGCC	TTCCAGGAGC	11760
TGGGTGATGG	GCAATAATGA	GCAGAGCCAC	GTGAAGGAAA	GATGGGTGAA	GAAATGTGTG	11820
TGGAGTCATG	CTGGCTGCAC	TGACCATGAA	ACAAAGGATC	TACCCCTCTA	GTAACTGCCC	11880
TACTCCTTTG	GTAACTGTTC	TGAAATTATA	ACTTGCCAGA	AGTTCAGAAG	GACCTAGTGC	11940
AGGTATTAGA	GGAAATTCGT	AAGATTGAGC	CATTTATTCC	TGCACAGATA	CATAATAATG	12000
		CLIDC	riti te queet	(Pule 26)		

GACACGGGCC	ATGGTGGCCA	GCATTCTTGC	TCTTGACAAT	GGTGAAGGGA	AGGGTTGTAG	12060			
GTCATGGCTA	TGCTCTCAGA	ATTATAATGG	AAAGAAACAG	CTCCTGAGTG	TTTACTATGA	12120			
GCCAAGGGCT	GTGCTAAACA	CTTTACCATA	TGATGACATC	TTTTTCTCAC	AGGTATCAAA	12180			
AAACAATAGG	ACATACCGGA	TAGCTACAAT	CTTTGGGCCC	CTGCAAACAC	AATAATGTGT	12240			
ATTCTCTTCT	ТСАААТССТА	CATATTGCTA	CAAACTGTAT	CCCTGAGGCA	TATTCATTGT	12300			
ААААТАААА	CATATAAAGT	ACTACTTTTG	TTTTTTGAGA	TGGAGTCTCG	CTCTGTCACC	12360			
CAGACTGGAG	TGCAATAGCA	TGATCGTGGC	TCACTGCAAC	CCCCTGCTCC	TGGGCTCAAG	12420			
TGATTCTCCT	GACTCAGCCT	CTCAAGTAGC	TGGGATTACA	GGCGCACGCC	CCCATGCCTG	12480			
GCTAATTTTT	GTACTTTTAA	TAGAGACCAG	GTTTCACCAT	GTTGGCCAGG	CTGGTCTCAA	12540			
ACTCCTGACC	TCAAGTGATC	CACCTGCCTC	GGCCTTCCAA	AGTGCTGGCA	TTACAGCTGT	12600			
GAGCCACTGC	ACCCGGCCCA	TATAAAGTAC	TACTAATGTA	ACAGGGTGCT	AGTCCAGACA	12660			
GTGACCACAC	GTGGTGTTCA	TTGAAGGCTG	GACTAACAAC	TCCAGCCTCT	CCGCCATCAC	12720			
AGAGTGATGA	CTGCCTTCCC	TGAAGCAAAG	CTTCTGGTTC	AAGGAAAGGC	CAGTAAGTGA	12780			
CTGCTCTTTG	TTGTATACAT	GTTAGATGAT	CAGGCCTCAA	GAAAAGTATA	AAGAGATCTT	12840			
TGTGCTCTCT	GGGACTCAAA	AAGCTGCACT	CTTTGGGGGA	AGGATAGCCA	GGTAAAAGTG	12900			
GCCCAGGTAA	AGAGGGCCTG	GTACACCTGG	TTCTGCAAGA	TGGTAGACAC	AAAAATGAGA	12960			
GCTACATTTG	GAGCTTATGT	GCCCCTAACT	CTGTACATAA	CCTGCAAGAT	СТААТТАСТА	13020			
ACAACTGGAA	TCTTGGAAAC	ACCTGTAGTA	CATCCTTGGC	TAAGGTTAGC	CCCAACAGAG	13080			
AGGGCTCTCC	TCTTACAGAG	AACCATTACA	TTTGTGCCTT	CATCCTAGAG	TAGAAAAGGC	13140			
ATGATCAGAC	TACTAAAAAG	ACATCAGGAA	AGGGCCTGTG	ACATCTGAGG	GAAGTGGTTG	13200			
CCCTCTCTGG	GATGTTGGTT	CGGGAAGAGG	GGCATGGAGG	AGTGCCTGCT	TTAGATGGTC	13260			
ATTCAGGAAC	CCAGGCTGAT	AGTGAGAGGT	GAAGCCAGTT	GGGCTTCTGG	GCTAGGGGG	13320			
ACTTGGAGAA	CTTTTGTGTC	TAGCTAAAGG	ATTGTAAATG	CACCAATCAG	CACTCTGTAA	13380			
SUBSTITUTE SHEET (Rule 26)									

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AATGGACCAA TCAGCAGGAT GTGGGCAGGG CCAAATAAGG GAATAAAAGC TGGCCACCAG 13440 AGCCAGCAGT GGCAAACTGC TCAGGTCCCC TTCCACGCTG TGGAAGCTTT GTTCTTTTGC 13500 TCTTCACAAT AAATCTTGCT GCTGCTCACT CTTTGGGTCT GCACTATCTT TATGAGCTGT 13560 AACACTCACC GTGAGGGTCT GTGGCTTCAT TCCTGAAGTC AGTGAGACCA CAAACCCACT 13620 GGGAGGAACA AACAACTCTG GACACGCCAA CTTTAAGAGC TGTAACATTC ACTGCGAAGG 13680 TCTGCGGCTT CACCTCTGAA GTCAGCGAGA CTATGAACCC ACTGGAAGGA AGAAACTCCA 13740 GACACATCTG AACATCTGAA GGAAGAAACT CCAGACACC CATCTTTAAG AGCTGTAACA 13800 CTCACTGCAA GGGTCTGCGG CTTCATTCTT GAAGTCAGCA AGACCAAGAA CCCACTGGAA 13860 GGAAACAATT CCGGACACAT TTTGGTGACC CAGATGGGAC TATCACCAAG TGGTGAGTAC 13920 CATCAACCC TTTCACTTGT TATTCTGTCC TATTTTTCCT TAGAATTCGG GGGCTAAATA 13980 TTGGGCACCT GTCAGCCAGT TAAAAGCGAC TAGCATGGCT GCCAGACTTA AGAAACTAAA 14040 GACACGGGTG TCAGACTTTC TGGGAAAGGG CTCTCTAATA ACCCCCAACT CTTTGGAGTT 14100 GGGAGCGTTG GTTTGCCTGG AACCAGCTTC CACATTTCCT GTACTTCTGG GCTGAGACGA 14160 GGGTCAACAT AGAGGAAAGC CATTCAGCTC TGGGGTCCCG ACAGCAAGTT GGTTGACCCT 14220 GTGGCCATGA TCACAACTCT CGAAGTCATG TTGCCCAAGC GAGACTCACC CATCTATCCT 14280 ATCTATCCTG ACTCTTGCTT CCTGGGTCCT AATGCCTGGA AGACAAACT TCCTCTTGTC 14340 TCTGTTCTCC AAGGCTAGTC CCACTTCTAA AAACCACTCC CTGTCTCTGG TGCTTTTCTA 14400 GTTTCTCCTA TAAGAATGAT TTCTAGTATA AACTCCAGGA CTCTATTCTC TTCTTTAGGC 14460 ACCCGGGCTC ACCAATCAGA AAGCCATAAT TTTTGCCCAA AGCCCCATCT TAGGGGGGAC 14520 TATCTGGAAT TTTAGGATCC CTCCTCAGAC AAGCAGGCCT AACAAAAGCT ATTCCTGAAG 14580 CTAGGATATG GGGAGCCTCA GAAATGATAT CCTTCCTATT CAAGTGAGGA CAAAAGGCAT 14640 CACTCTTCCA ATTCTGGAGA TCCCTTCCCT CCCTCAGGGT ATGGCCCTCC ACTTCACTTT 14700 TGGGGCATAA CGTCTTTATA GGACACGGGT AAAGTCCCAA TACTAACAGG AGAATGTTTA 14760

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GGACTCTAAC AGGTTTTCAA GAATGTGTCG GTAAGGGCCA CTAAATCCGA TTTTTCTCGG 14820 TCCTCTTTGT GGTCTAGGAG GACAGGTAAG GGTGCAGGTT TTCAATAATG TGTTGGTAAG 14880 GGCCACTAAA TCTGACATTC CTTGGTCCTC CTTGTGGTCT AGGAGGAAAA CTAGTGTTTC 14940 · TGCTGCTGCA TCAGTGAGCG CAACTATTCC AATCAACAGG GTCCAGGGAC CATTGTGGGT 15000 TCTTGGGCAA GAGGTGTTTC TGCTGCTGCA TTGGTGGGCT CAACTATTCC AATCAGCAGG 15060 GTCCAGTGAC CTTTGCGGGT TCTTGGGTCG GGGGGTGGGG GGAACAAACA GACCAAAACT 15120 GGGGGCAGTT TTGTCTTTCA GATGGGAAAC ACTCAGGCAC CAACAGGCTC ACCCTTGAAA 15180 TGTATCCTAA GCCATTGGGA CTAATTTGAC CCGCAAACCC TGAAAAAGAG TGGCTCATTT 15240 TATTCTGCAC TATGGCCTGG TCCCAATATT CTCTCTCTGA TGGGGAAAAA TGGCCACCTG 15300 AAGGAAGTAT AAATTACAAT ACTATCCTGC AGCTTGACCT TTTCTGTAAG AAGGAAAGCA 15360 AATGGAGTGA AATACCTTAT GTCCAAACTT TCTTTTCATT AAAGGAAAAT CCACAACTAT 15420 GCAAAACTTA CAATTCACAT CCCACAAGAA GAACTCTCAC TTACCCCCAT ATCCTAGCTT 15480 CCCTATAGCT CCCCTTCCTA TTAATGATAA GCCTCCTCTA TCTCCCCACC CAGAAGGAAA 15540 CAAGCAAAGA AATCTCCAAA GGACCACAAA AACCCCTGGG CTATCGGTTA TGTCCCCTTC 15600 AAGCTGTAGC GGGGGAGGG AATTTGGCCC AACCCAGGTA CATGTCCCCT TCTCCCTCTC 15660 TGATTTAAAG CAGATCAAGG CAGACCAGGG GAAGCTTTCA GATGATCCTG ATAGGTATAC 15720 AGATGTCCTA CAGGGTCTAG GGCAAACCTT CAATCTCACT TGGAGAGATG TCATGCTATT 15780 GTTAGATCAA ACCCTGGCCT TTAATTTAAA GAATGTGGCT TTAGCCACAG CCCGAGAGTT 15840 TGGAGATACC TGGTATCTTA GTCAAGTAAA TGATAGAATG ACAGCTGGGG AAAGGGACAA 15900 AGTCTCTCCC GGTCAGCAAG CCATCCCTAG TGTGGATCCC CACTGGGACC TAGACTCAGA 15960 TCATTGGGAC TGGAGTCGCA AACATCTGTT GACCTGTGTT CTAGAAAGAC TAAGGAGAAT 16020 TAGGAAAGAG CCTATGAATT ATTCAATGAT GTCCACCATA ACTCAGGAAA AGGAAGAAAG 16080 TCTTGCCTTC CTTGAGTGGC TACAGGAGCC TTAAGAAAAT ACACTCCCCT GTCACCCAAC 16140

TCACTCAAGG	GTTAATTGAT	TCTAAAAGAT	ATGTTTATTA	CTCAATCAGC	TGCAGATATC	16200
AGGAGAAAGC	TCCCAAAAGC	AAGCCCTTGG	CCCTGAACAA	AATTTGGAGG	САТТАТТААА	16260
CCTGGCAACC	TTGGTGTTCT	ATAATAGGGG	CCAAGAGGAG	CAGGCCAAAA	TGGAAAAGCG	16320
AGATAAGAGA	AAGGCCACAG	CCTTAGTCAT	GGCCCTCAGA	CAAACAAACC	TTGGTGGTTC	16380
AGAGAGGACA	GAAAATGGAG	CAGGCCAATC	ACCCAGTAGG	GCTTGTTGTC	AGTGTGGTTT	16440
GCAAGGACAG	TTTAAAAAAAG	ATTGTCCTAT	GAGAAACAAG	CTGCCCCCTC	ACCCATGTCC	16500
ACTATCGCTG	AAGCAATCAC	TGGAAGCCAC	ACTGCCCCAA	AGGACAAAGA	TTATCTGGGC	16560
CAGAAGCCCC	CAAGCAGATG	ATCCAACCAC	AGGACTGAGG	TGCTCAGGGT	TAGCGCCAGC	16620
TCATGTCATC	ACCTCACTGA	GCCCTGGGTA	CATTTAACCA	TTGAGGGCCA	GGAAATTGAC	16680
TTCTACTGGA	CACTGGTGCG	GCTTTCTCAG	TGTTAACCTC	CTGTCCTGGA	CAGCTGTCCT	16740
CAAGGTCTGT	TACCATCCGA	GGAATCCTGG	GACAGCCTAT	ATCCAGGTAT	TTCTCCCACC	16800
TCCTCAGTTG	TAACTGGGAG	ACTTTGCTAC	AGATAGTAAG	TATGCTTACC	TAATCCTACA	16860
TGCCCATGCT	GCGATATGGA	AAGAAAGGGA	ATTCCTAACT	TCTGGGTGAA	CCCCCATTAA	16920
ATATCACAAG	GAAACTATGG	AGTTATTGCA	CACAGTGCAA	AAACCCAAGG	AGGTGGCGGT	16980
CTTACATTGC	CGAAGCCATC	AAAAGGGGAA	GGAGAGGGGA	GAACTGCAGC	ATAAGTGGCT	17040
GGCAGAGGCA	GGGAAAGACA	AGCAGAAAGG	AAAGAGAGAA	AGAGCAGAAA	GTGAGAGAGA	17100
AAGAGAGATA	GGAAGTGATA	GCAAAGAGGG	AGTCAGAAAG	AAAAGAGAGA	GGAGAGAGAG	17160
AGGGGGAAAG	ACAGAGAGAG	ACAGAGGAAG	AGACAGAGAG	ACAGAAAGAG	AGAAGCAAAG	17220
AGAGGAAGAG	ACAAAGAAGG	AGTCAAAGAG	AGGGAAAGAG	AAGTAGTAAA	GAAAAAACAG	17280
TGTACCCTAT	TCCTTTAAAA	GCCAGGTTAA	ATTTAAAACC	TATAATTGAT	AATTGAAGGC	17340
CTTTTCTGTT	AACCCTATAA	TACTCCCAAT	ACCACCTTGT	TGTTCAGTGT	TAAACAAGGG	17400
TTATTAGCCC	AAAAGCCACT	GAGGCCACTG	ACAACCCGTA	GCCTTCTTAT	CCAAAATCCT	17460
TAACACAGCA	GGTTTCCTAA	CAGGGATCTA	ATCTTAGGTC	GACCAGACTG	GAGAACTGCC	17520
		CIDO	COURSE CITES	(Dula 26)		

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TTCAGGACAG GATGATAGAT GGTTCCTCCC AGGTGATTAA GGAAAAAGAC ACAATGGGTA 17580 TTCAGTAAGT GATAAGGAAA CTCTTATAGA AGCAGAGTTA GGAAAATTGC GAAATAAGTG 17640 GTCTGCTCAA ACGTTGAAGC TGTTTGCTGT TTGCACTCAG CTAAACCTTA AAGTACTTAC 17700 AGAATCAGGA AGGAGCCATC TATACCAATT CTAAGTTAAT ATGGACTGAA CGAGGTTTTA 17760 TTAATAGCAA AGAAAATTAA AATCTCAAAC TTACGAGGTT TTCAAGTAAA GTAAAGTTTG 17820 GTAAAAGTTA ACAGCGTAAC ATGTATTATC CTAGTACCAC ACATTCTCTC AAAGGATTTG 17880 CTCAGACAGT TTGCAAAAAA GAACGAAATC TGTCCTTACT CTACAATCCC AAATAGACTT 17940 TTGGCAGCAG TGACTCTCCA AAACCGCTGA GGCCTAGACT CTCATGTTGA GAAAGGAAGA 18000 TTCTGCACTT CTTAGGGGTA GAGTGTTGTT TTTATACTAA CCAGTCAGGG ATAGTATGAG 18060 ATACCACCCA GTGTTTACAG GAAAAGGCTT CTGAAATCAG ACAATGCCTT TCAAACTCTT 18120 ATACCAACCT CTGGAGTTGG GCGACATGGC TTCTCCCCTT TCTAGGTCCT GTGACAGCCA 18180 TCTTGCTAAT AGTCGCATTT GGGCCCTGTA TTTTTAACCT CTTGGTCAAA TTTGTTTCCT 18240 CTAGGATCGA GGCCATCAAG CTACAGATGA TCTTACAAAT GTAACCCCAA ATGAGCTCAA 18300 CTAACAACTT CTGCTGAGGA CCCCTGGACC GACCCGCTGG CCCTTTCAAT GGCCTAAAGA 18360 GCTCCCTCT GGAGGACACT ACCACTGCAG GGCCCCTTCT TCACCCCTAT CCAGCAGGAA 18420 GTAGCTACAG CGGTCATCGC CAAATCCCAA CAGCAGCTGG GGTGTCCTGT TTGGAGGGGG 18480 GATTGAGAGG TGAAGCCAGC TGGGCTTCTG GGTCAGGTGG GGACTTGGAG AACTTTTGTG 18540 TCTAGCTAAA GGATTGTAAA TGCACCAATC AGCACTCTGT GTCTAGCTAA AGGATTGTAA 18600 ATGCACCAAT CAGCACTCTG TAAAATGGAC CAATCAGCAG GATGTGGGCG GGGTCAAATA 18660 AGGGAGTAAA AACTGGCCAC CCGAGCCAGC AGTGGCAACC CACTCGGGTC CCCTTCCACA 18720 CTGTGGAAGC TTTGTTCTTT TGCTCTTCAC AATAAATCTT GCTGCTGCTC ATTCTTTGTG 18780 TCCACACTAC CTTTATGAGC TGTAACACTC ACTGCGAGGG TCTGTGGCTT CATTCCTGAA 18840 GTCAACAGAC CACGAACCCA CTGGAAGGAA CAAAGAACTC CCGATGTGCT GCCTTTAAGA 18900

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GCTGTAACAC TCACTGCGAA GCTCTGCAGC TTCACTCCTG AAGTCAGTGA GACCACAAAC 18960 CCACCAGAAG GAAGAAACTC TGGACACACC TGAATATCTG AAGGAACAAA CTCCAGACAC 19020 ACCATCTTTC AGAGCTGTAA CACTCACCGC AAGGGTCTGT GGCTTCATTC TTGAAGTCAG 19080 CAAGACCAAG AACCCACCGG AAGGAACAAA TTCCAGACAC AGTAGGAAAT CTGTATTTTT 19140 GATCTGTGGC TTCCAGGGTT ACTCCAGTCA TTGAAGTCTC CATTGCAGCC TTAAGGAAAC 19200 AGAGAATGGT TTGGAGGAGC ACATGTGGGA ATTGTTATGG ACCAGGCTTG AGATGCACAT 19260 AGGGCATTTC TGATCAAACC TAGCTGGAAG CAGGGCCAGG AAATATAATC TAAGGAAGAC 19320 AGTTTTTGTA GACAGTAGTA GTCTTTGCAT CTGAGACATG TAGATTATCA AGCAATTAAT 19380 TAGAAAAAT ATAGCCAGGT GCGATGGCTC ATGCCTGTAA TCCCAGCACT TTGGGAGGCC 19440 AAGGGGTGTG GATCACGAGG TCAGGCGTTC GAGACCAGCC TGGCCAACAT GGTGAAACCC 19500 CGTCTCTACT AAAAATACAA AAATTAGCCT GGTGTGGTGG CACGCATCTG TAATCCCAGT 19560 ACTCAGGAGG CTGAGGCAGG GGAATCTCTT GAACTTGGGA GGCAGAGGTT GCAGTGAGCC 19620 AAGATCACAC CACAGCACTC CATCCTGGGT GACAGAGCGA GACTCTGTCT CAAAAAAAA 19680 AAAAAAAAA GGAAAGGAAA ATATAATCAA GAATATTGAC AGGTAACATT TATTCAACAC 19740 TTACTATGCA CCAGGCAATA CACTAAGTGT TTTACATGGA TTAACTCATT TAATCTTAAC 19800 AATAGCCCTA TGAAGTCAGT GCTGTTATTA TCTCCACTTT ATAGATAAGG AAACTGAAGT 19860 ACAGAAGGT CAAGTAGAGA AATGGCCATG CTTGCATTCT CAGTTTTTGA AGCAACTGTT 19920 ACAGGAATCT GGTGTGAGAA ATGCTCTAAC AAGATGTGAG TCAGGGGTTG GGAGGTACTG 19980 AGTCTGAGTT GGGCAGTTGG GGATGGAAGG ATGGATGAAG AACAGCTTGA CAGAGAAGCT 20040 GACACTTGGC AACTCTGTGG GACCTTGAAG GGTTAGAGGG ACTTCACCAA AGAAACTGGT 20100 GGTCAGGGAT ACGGGAGGGT CACGGCAAGG AGGGAAAGGA AACTGTACCA CAGCAGAGAG 20160 TCTGAAGCTA CTACAGTGTA GTTCAGCGTA TAAAGAATAA TTATTTTAAG GTAAACTTAT 20220 AACCTCATGC AAATATAAAA TGAACACGTG TCAAAGATCT TATTTAATTT ATTAATTAAT 20280

CAGGARANTA ATCAGTTGCA TTTCACATAA CAAAATTCAG TTGCTTTTCT ACAGAAGGAA 20460 CAGAGAAATA ATCAGTTGCA TTTCACATAA CAAAATTCAG TTGCTTTTCT ACAGAAGGAA 20460 TTGTTTGCAT CATTACCAAT TTTTCTACAA CTAACAGAAT TATAAAATAA CTCAAACACA 20520 ATGAAAGGCA GATATAACCC ACAATGGTAT GATAGATACA ATATCCACAT CCAGGATGTT 20580 TTTTTCTCAT TTCAAAGTCT TTCACAAGTT TCCTGATAA GGGAGTGTCA ATAATACTGT 20640 ATGGCAGGCA ATAAGACTGG ATGGATGGTT GGGGCCAGGT TTTAAGGGGT AATAAATGCC 20700 ATGTAAAGGT ATGTGCATAC TGTGCAACAT GTCGGGGAAT CTCAAAATTAT TGGTAGAGTA 20760 TGTAAGAAAC ACTTGTGGAG CTTGTTAATA AATTCAAATT CCCAGACCCA ACTCCTCAAG 20820 GGTCTAAATAC AGTAGGTTTG GAGTAAAGCC TGAAAATCTG CAATTGTGCA AAAAAAAAAA	GAGGGAACCT	GTAAGATGTT	ACAGCCAGTT	CAAAGGATAA	ТТСАААТААА	TCCATGCACA	20340
ATGATAGCA CATTACCAAT TTTTCTACAA CTAACAGAAT TATAAAATAA CTCAAACACA 20520 ATGAAAGGCA GATATAACCC ACAATGGTAT GATAGATACA ATATCCACAT CCAGGATGTT 20580 TTTTTCTCAT TTCAAAGTCT TTCACAAGTT TTCCTGATAA GGGAGTGTCA ATAATACTGT 20640 ATGGCAGGCA ATAAGACTGG ATGGATGGTT GGGGCCAGGT TTTAAGGGGT AATAAATGCC 20700 ATGTAAAAGGT ATGTGCATAC TGTGCAACAT GTCGGGGAAT CTCAAAATTAT TGGTAGAGTA 20760 TGTAAGAAAC ACTTGTGGAG CTTGTTAATA AATTCAAATT CCCAGACCCA ACTCCTCAAG 20820 GGTCTAATAC AGTAGGTTTG GAGTAAAGCC TGAAAATCTG CAATTGTGCA AAAAAAAAAA	TATGTAGGCA	ATAAGGAATG	CTGAAATGAA	TTTAAAAGTA	GATGTAAACT	GATTTATCCA	20400
ATGAAAGGCA GATATAACCC ACAATGGTAT GATAGATACA ATATCCACAT CCAGGATGTT 20580 TTTTTCTCAT TTCAAAGTCT TTCACAAGTT TTCCTGATAA GGGAGTGTCA ATAATACTGT 20640 ATGGCAGGCA ATAAGACTGG ATGGATGGTT GGGGCCAGGT TTTAAGGGGT AATAAATGCC 20700 ATGTAAAGGT ATGTGCATAC TGTGCAACAT GTCGGGGAAT CTCAAATTAT TGGTAGAGTA 20760 TGTAAGAAAC ACTTGTGGAG CTTGTTAATA AATTCAAATT CCCAGACCCA ACTCCTCAAG 20820 GGTCTAATAC AGTAGGTTTG GAGTAAAGCC TGAAAATCTG CAATTGTGCA AAAAAAAAAA	CAGAGAAATA	ATCAGTTGCA	ТТТСАСАТАА	CAAAATTCAG	TTGCTTTTCT	ACAGAAGGAA	20460
TTTTTCTCAT TTCAAAGTCT TTCACAAGTT TTCCTGATAA GGGAGTGTCA ATAATACTGT 20640 ATGGCAGGCA ATAAGACTGG ATGGATGGTT GGGGCCAGGT TTTAAGGGGT AATAAATGCC 20700 ATGTAAAGGT ATGTGCATAC TGTGCAACAT GTCGGGGAAT CTCAAATTAT TGGTAGAGTA 20760 TGTAAGAAAC ACTTGTGGAG CTTGTTAATA AATTCAAATT CCCAGACCCA ACTCCTCAAG 20820 GGTCTAATAC AGTAGGTTTG GAGTAAAGCC TGAAAATCTG CAATTGTGCA AAAAAAAAAA	TTGTTTGCAT	CATTACCAAT	ТТТТСТАСАА	CTAACAGAAT	ТАТААААТАА	CTCAAACACA	20520
ATGGCAGGCA ATAAGACTGG ATGGATGGTT GGGGCCAGGT TTTAAGGGGT AATAAATGCC 20700 ATGTAAAGGT ATGTGCATAC TGTGCAACAT GTCGGGGAAT CTCAAATTAT TGGTAGAGTA 20760 TGTAAGAAAC ACTTGTGGAG CTTGTTAATA AATCAAATT CCCAGACCCA ACTCCTCAAG 20820 GGTCTAATAC AGTAGGTTTG GAGTAAAGCC TGAAAATCTG CAATTGTGCA AAAAAAAAAA	ATGAAAGGCA	GATATAACCC	ACAATGGTAT	GATAGATACA	ATATCCACAT	CCAGGATGTT	20580
ATGTAAAGGT ATGTGCATAC TGTGCAACAT GTCGGGGAAT CTCAAATTAT TGGTAGAGTA 20760 TGTAAGAAAC ACTTGTGGAG CTTGTTAATA AATTCAAATT CCCAGACCCA ACTCCTCAAG 20820 GGTCTAATAC AGTAGGTTTG GAGTAAAGCC TGAAAATCTG CAATTGTGCA AAAAAAAAAA	TTTTTCTCAT	TTCAAAGTCT	TTCACAAGTT	TTCCTGATAA	GGGAGTGTCA	ATAATACTGT	20640
TGTAAGAAC ACTTGTGGAG CTTGTTAATA AATTCAAATT CCCAGACCCA ACTCCTCAAG 20820 GGTCTAATAC AGTAGGTTTG GAGTAAAGCC TGAAAATCTG CAATTGTGCA AAAAAAAAAA	ATGGCAGGCA	ATAAGACTGG	ATGGATGGTT	GGGGCCAGGT	TTTAAGGGGT	AATAAATGCC	20700
GGTCTAATAC AGTAGGTTTG GAGTAAAGCC TGAAAATCTG CAATTGTGCA AAAAAAAAAA	ATGTAAAGGT	ATGTGCATAC	TGTGCAACAT	GTCGGGGAAT	CTCAAATTAT	TGGTAGAGTA	20760
CCCAGGTGAT TCTGATACAC TTTGAGAAGC ACTGGTGGAA CTAATAGTCA CTGAACGTTT 20940 TTGAGCAGGG GAGAAACCTG AGGACGTCTA TGTTGCAGCA GTGGAAACTT GATTAGAAGT 21000 AGGAGAAGAT GCATGGTCTT AAAAGAATGC AAAATGATGG CTAATATTTG AGTGCTTATG 21060 ATGGGCCAGG GGCTGTGCTA GGCGCGTGGC ACACATTCAA TACGATGGAA GCCTGTACCA 21120 GTCAGTATTA GTGGGGTATC TTTAAGAGTG ACCAGAATTA AGGGGGGTTT TCACCAAAGC 21180 CTGAGGACTG AGCCTCCTCA TCCTAAATTC AGACACAATG CTGTACCTAT GCATTTGCCT 21240 CCAGGCTGTT CCTGGGCCTC CAGGGACTGG CCCAGGCTCC TGATAAATAG GGACTCCCAA 21300 CAACATAAAG CCTGGATTTT GGAACTTCCT GAATGTTACT CAGGCTTTCT AGTAACTGTG 21360 GAGATCTGAA TAATAACACA ATTCTAAGTT CCCCTACTCA TAAAGCTGCT CATCATTTAG 21420 ATGGGGTAAA GCACCTGAAA TACAATGAGC ATCACTATTT TCATTCATCC ATGAAATGAA	TGTAAGAAAC	ACTTGTGGAG	CTTGTTAATA	AATTCAAATT	CCCAGACCCA	ACTCCTCAAG	20820
TTGAGCAGGG GAGAAACCTG AGGACGTCTA TGTTGCAGCA GTGGAAACTT GATTAGAAGT 21000 AGGAGAAGAT GCATGGTCTT AAAAGAATGC AAAATGATGG CTAATATTTG AGTGCTTATG 21060 ATGGGCCAGG GGCTGTCTA GGCGCGTGGC ACACATTCAA TACGATGGAA GCCTGTACCA 21120 GTCAGTATTA GTGGGGTATC TTTAAGAGTG ACCAGAATTA AGGGGGGTTT TCACCAAAGC 21180 CTGAGGACTG AGCCTCCTCA TCCTAAATTC AGACACAATG CTGTACCTAT GCATTTGCCT 21240 CCAGGCTGTT CCTGGGCCTC CAGGGACTGG CCCAGGCTCC TGATAAATAG GGACTCCCAA 21300 CAACATAAAG CCTGGATTTT GGAACTTCCT GAATGTTACT CAGGCTTTCT AGTAACTGTG 21360 GAGATCTGAA TAATAACACA ATTCTAAGTT CCCCTACTCA TAAAGCTGCT CATCATTTAG 21420 ATGGGGTAAA GCACCTGAAA TACAATGAGC ATCACTATTT TCATTCATCC ATGAAATGAA	GGTCTAATAC	AGTAGGTTTG	GAGTAAAGCC	TGAAAATCTG	CAATTGTGCA	AAAAAAAA	20880
AGGAGAAGAT GCATGGTCTT AAAAGAATGC AAAATGATGG CTAATATTTG AGTGCTTATG 21060 ATGGGCCAGG GGCTGTGCTA GGCGCGTGGC ACACATTCAA TACGATGGAA GCCTGTACCA 21120 GTCAGTATTA GTGGGGTATC TTTAAGAGTG ACCAGAATTA AGGGGGGTTT TCACCAAAGC 21180 CTGAGGACTG AGCCTCCTCA TCCTAAATTC AGACACAATG CTGTACCTAT GCATTTGCCT 21240 CCAGGCTGTT CCTGGGCCTC CAGGGACTGG CCCAGGCTCC TGATAAATAG GGACTCCCAA 21300 CAACATAAAG CCTGGATTTT GGAACTTCCT GAATGTTACT CAGGCTTTCT AGTAACTGTG 21360 GAGATCTGAA TAATAACACA ATTCTAAGTT CCCCTACTCA TAAAGCTGCT CATCATTTAG 21420 ATGGGGTAAA GCACCTGAAA TACAATGAGC ATCACTATTT TCATTCATCC ATGAAATGAA	CCCAGGTGAT	TCTGATACAC	TTTGAGAAGC	ACTGGTGGAA	CTAATAGTCA	CTGAACGTTT	20940
ATGGGCCAGG GGCTGTGCTA GGCGCGTGGC ACACATTCAA TACGATGGAA GCCTGTACCA 21120 GTCAGTATTA GTGGGGTATC TTTAAGAGTG ACCAGAATTA AGGGGGGTTT TCACCAAAGC 21180 CTGAGGACTG AGCCTCCTCA TCCTAAATTC AGACACAATG CTGTACCTAT GCATTTGCCT 21240 CCAGGCTGTT CCTGGGCCTC CAGGGACTGG CCCAGGCTCC TGATAAATAG GGACTCCCAA 21300 CAACATAAAG CCTGGATTTT GGAACTTCCT GAATGTTACT CAGGCTTTCT AGTAACTGTG 21360 GAGATCTGAA TAATAACACA ATTCTAAGTT CCCCTACTCA TAAAGCTGCT CATCATTTAG 21420 ATGGGGTAAA GCACCTGAAA TACAATGAGC ATCACTATTT TCATTCATCC ATGAAATGAA	TTGAGCAGGG	GAGAAACCTG	AGGACGTCTA	TGTTGCAGCA	GTGGAAACTT	GATTAGAAGT	21000
GTCAGTATTA GTGGGGTATC TTTAAGAGTG ACCAGAATTA AGGGGGGTTT TCACCAAAGC 21180 CTGAGGACTG AGCCTCCTCA TCCTAAATTC AGACACAATG CTGTACCTAT GCATTTGCCT 21240 CCAGGCTGTT CCTGGGCCTC CAGGGACTGG CCCAGGCTCC TGATAAATAG GGACTCCCAA 21300 CAACATAAAG CCTGGATTTT GGAACTTCCT GAATGTTACT CAGGCTTTCT AGTAACTGTG 21360 GAGATCTGAA TAATAACACA ATTCTAAGTT CCCCTACTCA TAAAGCTGCT CATCATTTAG 21420 ATGGGGTAAA GCACCTGAAA TACAATGAGC ATCACTATTT TCATTCATCC ATGAAATGAA	AGGAGAAGAT	GCATGGTCTT	AAAAGAATGC	AAAATGATGG	CTAATATTTG	AGTGCTTATG	21060
CTGAGGACTG AGCCTCCTCA TCCTAAATTC AGACACAATG CTGTACCTAT GCATTTGCCT 21240 CCAGGCTGTT CCTGGGCCTC CAGGGACTGG CCCAGGCTCC TGATAAATAG GGACTCCCAA 21300 CAACATAAAG CCTGGATTTT GGAACTTCCT GAATGTTACT CAGGCTTTCT AGTAACTGTG 21360 GAGATCTGAA TAATAACACA ATTCTAAGTT CCCCTACTCA TAAAGCTGCT CATCATTTAG 21420 ATGGGGTAAA GCACCTGAAA TACAATGAGC ATCACTATTT TCATTCATCC ATGAAATGAA	ATGGGCCAGG	GGCTGTGCTA	GGCGCGTGGC	ACACATTCAA	TACGATGGAA	GCCTGTACCA	21120
CCAGGCTGTT CCTGGGCCTC CAGGGACTGG CCCAGGCTCC TGATAAATAG GGACTCCCAA 21300 CAACATAAAG CCTGGATTTT GGAACTTCCT GAATGTTACT CAGGCTTTCT AGTAACTGTG 21360 GAGATCTGAA TAATAACACA ATTCTAAGTT CCCCTACTCA TAAAGCTGCT CATCATTTAG 21420 ATGGGGTAAA GCACCTGAAA TACAATGAGC ATCACTATTT TCATTCATCC ATGAAATGAA	GTCAGTATTA	GTGGGGTATC	TTTAAGAGTG	ACCAGAATTA	AGGGGGGTTT	TCACCAAAGC	21180
CAACATAAAG CCTGGATTTT GGAACTTCCT GAATGTTACT CAGGCTTTCT AGTAACTGTG 21360 GAGATCTGAA TAATAACACA ATTCTAAGTT CCCCTACTCA TAAAGCTGCT CATCATTTAG 21420 ATGGGGTAAA GCACCTGAAA TACAATGAGC ATCACTATTT TCATTCATCC ATGAAATGAA	CTGAGGACTG	AGCCTCCTCA	TCCTAAATTC	AGACACAATG	CTGTACCTAT	GCATTTGCCT	21240
GAGATCTGAA TAATAACACA ATTCTAAGTT CCCCTACTCA TAAAGCTGCT CATCATTTAG 21420 ATGGGGTAAA GCACCTGAAA TACAATGAGC ATCACTATTT TCATTCATCC ATGAAATGAA	CCAGGCTGTT	CCTGGGCCTC	CAGGGACTGG	CCCAGGCTCC	TGATAAATAG	GGACTCCCAA	21300
ATGGGGTAAA GCACCTGAAA TACAATGAGC ATCACTATTT TCATTCATCC ATGAAATGAA	CAACATAAAG	CCTGGATTTT	GGAACTTCCT	GAATGTTACT	CAGGCTTTCT	AGTAACTGTG	21360
CATTCCGGGG AGATCAGTAA GTTGATGTAT CACCCTTGAA CAGGGCAAAA TGAATACTCA 21540 CCAGGAATAT GTGGTATTTT AAAAAGAAGG CAAAGGGAAG AATAGTGGGG ATGGGGCAAA 21600 AACTTTAAAT AGATTCCCCC AATCATATAT GGCAATTGAA GATAATTAAA TTATCATTTT 21660	GAGATCTGAA	ТААТААСАСА	ATTCTAAGTT	CCCCTACTCA	TAAAGCTGCT	CATCATTTAG	21420
CCAGGAATAT GTGGTATTTT AAAAAGAAGG CAAAGGGAAG AATAGTGGGG ATGGGGCAAA 21600 AACTTTAAAT AGATTCCCCC AATCATATAT GGCAATTGAA GATAATTAAA TTATCATTTT 21660	ATGGGGTAAA	GCACCTGAAA	TACAATGAGC	ATCACTATTT	TCATTCATCC	ATGAAATGAA	21480
AACTTTAAAT AGATTCCCCC AATCATATAT GGCAATTGAA GATAATTAAA TTATCATTTT 21660	CATTCCGGGG	AGATCAGTAA	GTTGATGTAT	CACCCTTGAA	CAGGGCAAAA	TGAATACTCA	21540
	CCAGGAATAT	GTGGTATTTT	AAAAAGAAGG	CAAAGGGAAG	AATAGTGGGG	ATGGGGCAAA	21600
	AACTTTAAAT	AGATTCCCCC				TTATCATTTT	21660

AATTGAGTAA	GTACTCATAG	AGCCCTCACT	ATTTGAAAAT	GAACTGCCTC	CTAATTGTTA	21720
TTGTGCAAAT	GTGATACATT	AAACTTAAGC	ТАТТТТААТА	AAACATCCAT	TTTCGGAAGC	21780
TGTAGTAGGT	TCTCCCAGGT	CAGATTTGAT	AAGCCATAAA	GAACAAATGC	CAACTCCTAT	21840
TTTTCTATGG	TGCTGGGAAA	TAAGAGAGAA	ATGTGTAATT	CAAAGCAATC	ATTTAATTTT	21900
ATCCAATAGC	TTGATTCTCC	TCTCTCTTCT	AGCCTTTTAG	CTAAGCTGTT	ACCAAGTAAC	21960
CACACTAGTT	GGCTTGAGTC	TTACCACTGT	TTCCCTGACC	CCACAGTGGA	GAGACTGCAT	22020
CTGTTAAAGA	GCAGTTATGT	AACCATGGCT	ATGCTGAGCT	GGGATTCCCA	AGGCTTAGGT	22080
TCTTTCTGTG	AATGACCTTC	ACCAAGACAC	CTGAGGTCTG	TGTGGAACCA	CAGGCTTGTC	22140
ATCTCTAAGG	CAGAGTTGAT	AATTCCATCT	GTTTCTTGAG	CCCACACTGA	GAAAAAGATT	22200
ACATGACTGC	AGTTATTTGA	ATGCCTCATG	GAAAGACGTC	TTATAAATAT	TATAATTAAT	22260
GTTATCATTA	AGTAATGCTT	CAATGCAGAT	CTTCCAAGTA	TAAATATCAG	CTGAGTAAGA	22320
AGTCAATCTT	CCCTGAAGCA	AAATTGAAAT	TTGTAAATGC	GATTTCTGGG	AGCTTATTTT	22380
GTAATACATG	ATTCCAGAGT	GTCCATAACA	CACACAATTG	TCTTTTTCC	CCTACATGGG	22440
CTATTTACAA	CAAAATTGGA	CTTATAATGT	TTATTTCCAG	GGATGACTAG	AACTTTAATA	22500
ACAAACCTTG	GGCCAGGCAT	AGTGGCTCAT	GCCTATAATC	ACAGCACTTC	GGGAGGCTGA	22560
GGCTGGTTAG	ATTACTTGAG	GCCAGGAGTT	TGAGAACAGC	CTGGCCAACA	TGGCAAAACC	22620
CTGTCTCTAC	TAAAAATACA	AAAATTAGCC	GGGTGTGGTG	GCGCATGCCA	GTAATCCCAG	22680
TTACTAGGTA	GGCTGAGGTA	CGACAATCGC	TGGAACCTGG	GAGGCGGAGG	TTGCAGTGAG	22740
CTGAGATTGC	ACTACTGCAC	TCCAGCCTGG	GTGACAGAGA	AAGACTCTGT	СТСАААААА	22800
ААААААААТ	ААТААТААТА	ATAATAAACC	CTGATGAAAG	GTTTCTAAAA	TGTTTTCATC	22860
TAATGGTTTT	CTTGACAATT	AAATTTTCTA	TATAATGTCA	GTTCATAAAA	AAACTGAGAA	22920
CGACCACATG	TCATATCGAC	TGCTTAAAAG	AAAATACGTA	ТАТТТАСААА	CATATACACA	22980
ATACTGTCTT	TTGTCTGGTT	AGTTTAGAGG	TTAGATAAAC	TGCAGTATGT	TGTAGTGGAC	23040
		ar in an	***************************************	(D. 1. 0.4)		

AGATCATAGA	ACTAGGAGTC	AGGATGTCTG	GATTCCTAGG	AAGCAATGAA	TAGGTTGCAC	23100			
GGTGCAGCTC	AAGGTTATTC	AAAGTGTGGT	GCCCAGACCA	GCATCATGAG	TATCCTCAGG	23160			
GAGCTTGTTA	GAACTGCAGA	TCCTTTAACT	CATTGAATCA	GAATCCCTAG	GTGTGGGGCC	23220			
CTGAAATCTG	TATTTTAGCA	GGCTCTCTGG	GATTGTGATG	TGCCTTAGAG	TTTGACAACC	23280			
ACTGGGTAGC	TGATCCTGAC	TTAGACTTAT	CAGGCATGTG	ATCTTGAACA	AGTCACATAA	23340			
TCTCACTGAG	TTCAGTTTTC	TTATGTTTAA	AATAGGCCCA	АТААТАТСТА	TTTCACATGG	23400			
ATTGCTTTGA	GGATTAGGCA	AGAGATCTGT	AACAGACACT	GTAGAACAGT	GTCTCTGGTC	23460			
TACAGCTGAC	CTTCCATAAA	TGGTAGTTGC	CTTGATTCTC	TGCTCTGCCA	CATAATAGCT	23520			
GGTTAACTAT	GAGCAAGTAA	TTTAGTTCTT	CTCAGTTTAG	TTTCTTCCCC	TGTAAAAGAA	23580			
GGAAAATAAC	TGTTATACTC	CATTTCTGAA	TTGCTATAAA	AGTCATTTAA	TTATGGGCAT	23640			
TGAAGCTCTT	TGTTCACTGT	ATAAGGACTG	TACATCTAAG	GGATTAATGA	GACCAGGCTT	23700			
ATGATTTTAA	GCATGGAGTA	AATAGTAACA	CTGACTCTGT	TCTATGAACC	ACATGGAAAC	23760			
TCTAAAGAAT	ATGCACATTT	GAAACACAGG	TATCATCTGG	GGAAGGTGAT	CTGCTCACCC	23820			
AAACCAGTTC	ATGAACATCA	ATCTCCAGTG	GCGTGCTGGA	GCTAGCTGTA	CCAGCTCATG	23880			
AGGGCCAATT	GTTTCATTTT	TAGGAATTTT	GTTTGCTGGT	TAAAAATAGT	CATTATTTAA	23940			
AATTAAATTA	TGTAAACAAT	AATATTAGAT	AAAATAAGTT	AAAATAAAA	CAAAGGAACT	24000			
AATTATCCCC	AAACTCTTCC	CCACCTAATT	АТТТТАСТАТ	CTGTGCCTTG	GGATTATTTA	24060			
CATTGATTTT	ATCCATATGG	TGACAATACT	АТТСАТАТАТ	AAATGGTGTG	CTTCTCTTCA	24120			
TAACTCTACA	TAGCCTGATG	TCAGGCTAGT	AGCTTGAAAT	TGGCCACAGT	GGGAGTGTGA	24180			
GCATTTGTAC	CATGAGGCTT	GGCCAAGGCT	ACAAATCCAG	ACTTTTGTTT	TTCCCTCCTG	24240			
GAGAGCTGTC	TGTTAAAAAT	TTACCAACAC	ACCACTGGTC	TTACCTTTGT	TAATTTACCA	24300			
CAGTCCAGGT	TCTGACCTAG	ACTTAGAAAC	CTGGATTTGT	CAGCAAGCTG	AGGATAGAGC	24360			
CATTATTTCT	AAGAAGGACT				ACCTTCAGAA	24420			
SUBSTITUTE SHEET (Rule 26)									

TATCAATTTA	TTAATTTACA	GTGAAGAAAG	CCACCCCAGG	GCATTCCCCA	GGGGAAGGCA	24480
AAAAGAGCTA	GTTGCACATT	TTGAATGTTT	GATGACATTA	GGGTAAGGTG	ACACAGAATA	24540
TCCATTTCCA	CAACTGAGAT	ACCTGCTGCC	TTAAGGAAGG	GACAGGCAAG	TCCTTGGGCA	24600
GGACCTTAGA	TTGTCACTGT	CCATCTTGCT	GTAGGACTCT	CCTTTCCAGG	CATGACGATG	24660
GCCAACTCTG	TCCTCCTACC	CTACTGATGG	GATTATCTTT	TCTTGACACA	TGGCAATGCC	24720
TCCAATCAGA	GGCTGGTAGC	TATTTTTAAT	CTTCAGGGCA	GTATTTTTCA	AAGGGAAGTT	24780
CATGGACCAT	ATGCATCTGT	· ATCATTTAGA	TGTATATTAA	AAATGCTTAG	TCTTCCCCAG	24840
TTATACTAGA	TCAGAATCTC	TGTTGGTGGG	GCCCACGAAT	CGGTATTTTC	AACAAATCAC	24900
TAGGTAATTT	CTGTATATAC	TATAGTGTGA	AGACCACTGC	TTGAAGGTTT	CTTTGCATAT	24960
CTCCACTAAA	ТАТАААААТ	ATTGACTTCT	AGATTTAACT	CCCAAAGCAC	TTGCATTTTT	25020
AAGTTTCTGG	GGGCATTATA	TTGTGGTACC	CCTATACCAC	TCACACTCTA	GTCAGGAGGT	25080
ATATTATGGA	CTGAATGTTT	GTGTCCCTCC	AAAACTCATA	TGTTGAAGTC	TTAGCTTCCA	25140
ATGTGATAGT	ATTAGGAGAT	GGTGCCTTCT	GGAGGTAAAA	TCAAGCCCTC	ATGAATGGGA	25200
TTAGTGCCTT	TAGAAAGAGA	GCTCGTCACT	GTCTTTCCAT	CAATTGAAGA	TGCAGTGAGA	25260
AGCTGGTAGT	CTTGCATCTG	GAAGAGGGCC	CTCACACAAC	CTGATCATGC	TGGCACCTGG	25320
TCTCAGACTT	TCTGCCTCCA	GAACTATGAG	ATGATAAATT	TCTGTTGTTC	ATACCCCACC	25380
CAGGCTACAA	TATTAGGTTG	CTGCAAAGTA	TTTGTGATTT	TTGCCTTTAC	TTTTCAGGGC	25440
AAAAACTGCA	ATTACTTTTG	TGCCAACCTA	ATATTTTGTT	ATAGCAGCCC	GAACTAAGGC	25500
AAGGGAGACT	ACATCAGACA	GTGTAGCTAT	GTAAGTACAA	ATGTATCCCT	GTTGAAGGAA	25560
AACTAAGTTC	TAACCCTGAC	TTCAGGCCAG	TAGCCACCTT	TTCAATCTCT	TTCATGAAGG	25620
GACCATTATC	ATTATCACTG	GTGGCAAAAA	TAGAGCACGA	GAATGGAATT	TGCTTTTCTG	25680
TGAAATCTCA	GTGTATACAG	ATGAAGAGCA	AGGGTTTGCT	TTCATCTCTA	AGAAGCAAAA	25740
GTGAGTACGG	ACTGGCACAT				GGTCTTAACC	25800
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AGGAGTGAAT	TTGACTCCAG	GGAACAGTTG	GCAATGTCTG	GAGACGTTTT	TATTTGTTAT	25860
AGCTGGGGGA	TGAGTGGGTG	GGTTGCTACT	GGCATCTAGT	GGGTGGAGAC	CAGAGATGCT	25920
GTTAAACATC	CCGCAAAGCA	CAGGACAGTC	CCCGACAACA	AAGAATTATC	TGGCCCCAAA	25980
TATCAATAGT	GCCAAAGTTG	AGAAACCTCA	TTCTAGCTTC	CTTTTCCCTT	CTACGTTCTA	26040
ATCAACTGTT	GTTCTTTCAG	CATTAGGATT	CATCCAGCAG	TCTCTTTCCC	CAGCAATTTG	26100
TTGAAATTTT	TTTAAAAATG	GACTCATTTT	AGTGTCACAA	GAAAAAAATA	CATTCACAGG	26160
AAAGGATGGG	TCATTTTGTT	TAATGATGTT	TTGCCTTTCA	CATAGCAAAA	GCTTAATAAA	26220
GTATTTTTAA	ATAAAATGGT	GAATAGATCA	AAACATTAAT	TTCACATGTG	TTTTAATAAA	26280
TAACAGGAAG	ATGGCTATAT	ТАТАТАААТТ	GTTCTTGTAT	ATGTCTTGAG	TGGATCATCA	26340
AACACAAACG	TATCTACATG	CCTTTTCTTG	TGAATAGATC	ТААТААТААС	GCTCTTCTAA	26400
АААСАААТТА	AATGGATATT	ATTTGCTGAG	AATGTAATGC	TTGTGTGAAT	AGAAGCCAGC	26460
CCTGAATCCA	AGCCCCCAGA	ТСТАТТТААА	GAATTTGAAG	AATGTCAGAA	AAGCACGTGG	26520
CTTCAAGGTT	AATGTGTAAG	ACTCACAGAA	ACTTGAAAAA	TCACTATGAC	TAAAAAGAAA	26580
GTATGAGCTC	CCTGCATGCC	TGTAAATTGG	AATGACAGCC	AAAACCAGTT	ААТТАТАААА	26640
ACAGCTAATT	TAACAGGTTT	TCAAATTTGT	ТТСТТТСТСС	AAGTAGCATA	TAGTCAATAA	26700
TCCTTAAAGA	GAAAGCAAAG	AAGGGGAAGC	ACTGAACCAA	ATTTGCTTTT	TTGTACCTGC	26760
TCAGCTCAAA	TGCAGAGTTC	TCTACCTGGA	AATTGACTGC	TTCCATAGTT	TGATAGCCAC	26820
AGAĢAGATGG	GAACAGAAGG	AGAGGTATAA	TCCCAGACTT	GATTCAGCTA	TAGAGAATGA	26880
CAATAGTGTC	AGAGGCCTTC	CAACCAGAGC	GACTCCATCT	TGAATACGGG	CTGGGTAAAA	26940
CAGGGCTGAG	ACCTACTGGG	CTGCATTCCC	AGGAGGCTAA	GCATTCTAAG	TCACAGGATG	27000
AGACAGGAGG	TCAGCACAAG	ACCTTGCTGA	TAAAACAGGT	TGTAATAAAG	AAGCCAGCCA	27060
AAACCCACCA	AAACCAAGAT	GGCCATGAGA	GTTATCTGTG	GTTGGTCTCA	CTGCTCATTG	27120
TATGCTAATT	ATAATGTATT	AGCATGTTAA	AAGACACTCC	CACCAGTGCT	ATGACAGTTT	27180
		SUBST	TTUTE SHEET	(Rule 26)		

ACAGGTACAT	TGGCAACTTC	CGGAAGTTAC	CCTCTATGGT	CTAAAAAGGG	GAGGAACCCT	27240
CACCTCCCAG	AATTGCCCAC	CCCTTTCCTG	GAAAACTTGT	GAATAATTCA	CCCTTGTTCA	27300
GCATATAATC	AAGAAGTAAC	TGTAAGTATC	CTTAGGCCAG	AAGCTCAGGC	CACTGCTCTG	27360
AATGTGGAAT	AGCCATTCTT	ТТАТССТТТА	СТТТСТТААТ	AAACTTGCTT	TCACTTTACT	27420
GTATGGACCC	CTGTGAATTC	TTTCTTGCAA	GAGATCCAAA	AACTCTCTCT	TGGGGTCTGG	27480
ATCAGGACCT	CTTCCCAGTA	ACAATAGTAG	TAAGGGGTCG	GGGAAACTGG	ACAAAGGAGT	27540
TTAAGAAGCC	TTAGATAAAG	GGTCCTCATC	ATTGTCATAA	САТААААТСА	TGGACTCCTA	27600
GAATTTTATA	GCTGATAGGA	TTAGAAATTT	CAAAATTCAA	TTTCATTAAT	TTTCATCTGC	27660
GAAAACAGAT	GGCCAGAGAG	GCCAAACAAT	TTGTTAAGGA	GCACTGAGGC	GATGGAACAC	27720
CACACTGGAC	CGCAAACCTC	CTAGCAGAGT	ATACAAGGCC	TTTGATCTCC	TCAGTCAGAA	27780
TGAACTAGAG	CTTTCCAGGG	GTACCCTTTC	TGACTGTTTA	GCATGTTTGC	CAGTCTGACT	27840
AATTTTGAAG	TTGCTTAAAT	ATCTGTCATT	TCCACTGTAT	CATAATCTCC	TCATTCATCT	27900
TCAATCTCCA	ATGCCTTGAA	CTCAGTAAAT	GTTAGTTGAA	CAAAAGTAAA	TTGAACCCAG	27960
AATTTCTGAT	CATAATCTGG	AGCACTTTAA	AATTGTCAGC	TTACTGGGAA	ACGGGATAAC	28020
ATGTGATTTG	TCTTTGATTT	TTTTTTCTC	ATATGCTTTT	TCCACCTATA	GATGCTACAC	28080
GAATGTTTTT	AAAATCTGAT	АТАААААТТА	AAATTAAAA	АТТАААААА	GAAAATTTGA	28140
TACAATGCTA	CATTTAGAGT	GTTGTGATTA	GATTCCTTAA	GTGTATCATG	GTGATCTCTA	28200
CATCACGTGG	TGATCAAATT	GCTTTGGGTT	TTAACACATA	ACTGACAAAG	GCTTGGGGAC	28260
ATGTAAGATC	CCAAATACAT	TTTTATTGAT	TTTTTTTTCT	ТСТТСТССТ	СТТТТАААТА	28320
ACTTTTTTT	GTTATAAGAA	TAATTCATGT	TCAGTGGAGA	AACCATAGAA	AATAGTGACA	28380
AGTGAAGGAA	ТАААТТТААА	ATGACCCATA	ATTGTACCAT	ACATTCTGAT	TTTTTAAACG	28440
CTGAACAAAT	TAGCCTTGGG	TAAGTACCAG	GAATAGAGTG	CAGCATTGAA	AGTTAAAGTT	28500
TGGGGAAGGA	TAGCTGACTT	AAGAAATTAT	CTAGTTAGAC	ATTTTTTGGA	TGGGGTAATT	28560
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TTGCAGATGA	CATTAGTGAG	AGAAAGGACT	TGCCACTCTC	ACACAGCTAG	TAGGGGTGTG	28620
GGAGGATATT	GGAACCAAGT	TTCAAGTCTT	CAGTGAAGAA	TCAAGGGAGA	AGTTCTAAAA	28680
ССТААСААТА	TCCCTCTGGA	TGGACATTTA	ТТТТАТТАСТ	ACAATAAGCC	ACACGGTGAG	28740
TCATAAGGAG	CATTTCATTC	TTCTAATATG	TCTCTACTGT	ATTTAGAATC	TGATAAAGCC	28800
CTATTAGAAT	TCATCTCTTT	AAGAATAAAA	GAAGCTGAGG	AACTAAAGAG	AGGGTTGGAA	28860
ТААТССАСТА	ATTATATCCG	TTAAGCTTCA	GTTACGCTAA	TAAGGAATAT	CACATGACTG	28920
TGGTGTGTGC	TTGTTCTGAA	CAGTAAAGTA	CATGAGGAAA	GATAAGATTC	AGGGCTGAAA	28980
TGTCCTTCAG	CATATGTAGG	TAGTGGTGAT	GAAAGTCATT	AAAAGAAAAA	TTGATTGAGG	29040
TATTTTAGTA	AACAAAAGAA	CTCACCACTT	ACCCATCAGG	AAGTGTATTG	TTAATGCAGT	29100
GCTGTTCAGC	CTTCTGGAAG	AAAAGGTTTC	TTCATGCTTC	TCTCTTTAGC	СТААТТСТТА	29160
TCCTGTCACT	TTTCAGGCAA	AATTAAAAA	AAAAAAAGAT	TGAAAACGAT	GCTCCTATTT	29220
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GATGTAAGTG	TGAAAGGAAG	CCCATGTAAT	TGACTAGGCA	GTATCTGAAG	AAGCAGGAAA	29340
TACAGTGTTA	AGÁAAATGAA	CAGGCATGAA	AACCATGGCT	ATTTGATAAA	AGTAAATAAT	29400
TTCTGCAGTT	CACATGTTCT	CAGCATATTT	TCTTTGATAC	TGACTTGCTT	AATATGACAA	29460
TAGCAGAACC	ATGGTAGCTT	GTAGGCATTA	CTTTTCTTTT	AATTTCTTTT	ACATTTTGAA	29520
TTTACCAGCA	CTCACATTTG	TATTACTTTT	GGGTTATACT	GAGGATCTAT	AACTTATAGA	29580
TCAAATACCT	GACATATATA	TGCATTCTCT	GAAGTCTTAG	GGCAGAACTA	GAACATTCTT	29640
GTGAACATCA	GTATAAGATA	TTAAAATGGA	AGTTTTGCCT	AAGACTGAAG	ACAATAAAAA	29700
TATCATAGTC	TGAAATGAAT	GCCAGCACAC	CATACAGGAT	TTAAATATCT	ATACATATAT	29760
ATGTGTGTGT	АТТАТАТАТА	ТТТААТАТАТ	ATCTGTGTGG	GATAGGAAGA	GGTAGGGGGA	29820
AATCAGTTTT	ACAATTATTA	AGTATTTCAC	CCTTGACAAG	AGTATATATA	TTGGAAATCA	29880
GTTGGAGAGT	ATTTTCAAAG	ATAAATGTTA	GTGTGCTATG	AATGAATCCA	CCCCTACCAC	29940
				(D. 1. 0.6)		

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CACTGAGGCA GGGTAGGAGA GGCCTGTGCT CCTCAAGCAT AGTTGGAAAA GGACCTCAAC 30000 AAGACCACTT CAAGAGTCTA ATGTGTGGAG ACTGTTGCTT AGGGAGACCT TATGGTCTAG 30060 CTTCTGACTC ACAGCTAAGT CAGGGAGACA GGTTGGCTGC TCTGATCGTG GAGTCCAAAA 30120 GATGGCCTGC ACTGAAAAGC CTCATGAGTG TTGACTTAGG GCTAGTCTAA GAGGTCCCTG 30180 GAAGAAGAAA CACTCAGTAG GAGAGAAGCT GGAGGTACCT TCAGTGCTGA ATTGGAACTA 30240 GATTCATTCC CCCGTGGAGC AAATTACATA GGAAAGATGC CCAGTGATGG AGAGTGGGGG 30300 TGTCTCTAAC AATTACCCAC CCACTGCCCC CACCCTAAGA AAAAGAAAAT CACATACAAC 30360 CAGTCAGCTG TAAACATATG CCGAGCCTAG TAAACTCAGA TACTAAGTTA CCAGGGTACC 30420 TGGCAAGTAA GAACATTCCT GATTCCCTTC CTCTCTTCTC TTTGCCCTCC AACCTTAGTG 30480 GCTAGCAAGA TGGGGAGAGG AGGAGAAGCT GTAAGTGGGG AAAAAAGAGC AGCTTTCTCT 30540 CCTTTTCAGC TGCTGGATTC TCCCTCATCA TAGGCCTGAG CTGGGGAATC AGGAAGAAGG 30600 ATTCTTTTTA AAACTGAAGT AACGTTATCA TTTAATTTTA AAACATTTTA AATTTTGACA 30660 ATGTTGAGAT TAGATATACT AATTATTAAA CTAAGATTAT GTTTTGCAGC TTGAAGTGAT 30720 AAGAAAAACT CTTATCTAAG AGCATCCAGG AAAGTCGGGG GTTTCCTGAA CATCCTTTTA 30780 AATCCTTTGG AAGTCAGCTT TCAGAGAGGA TTTAAAGTGT AGACTGGGCC TTCAGAAACT 30840 TGGTTAATGT AGGGGTTTCC TATGCAGACT TGGGGACTAT ACCTTGTGTG GAAGAGAAA 30900 AATAAGATTA TCTTACATTT TTCCCATTCC TTTTTCAAAA AGAAAGCTCA GCTAGCATGA 30960 AAGTTAAATT CAAAACGTAA TGGGTATTAT TTGCATATTC AAATCTAGTG CATATCATGT 31020 AAGTACTGAA TTATGGTATT CATTATTTCA AATGACAAGC TGGATTTTTT TTTCTTTCGA 31080 ATTTCACAAA TTAATTTTCC TTGGAACCTT TTGGTTTGGG CTTTAAGAGT TTAGGCTTTC 31140 ATCACAAAGA GAGGACAGCC TTGAAGATTA AAGTGTGTGG CTCTTCTCAA GATGTTCTTA 31200 GTCCAGCAAA GGATTCTATG CATATTTGGG CTTCCTTCTG TCTCATAACC TGTATTTCTT 31260 GATATTCTAT TTATATTCTG TAAGATTTTT TTTTTAAAGG AAAAATTCTT CCATGGTTGA 31320

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TAGAAGCTCA	TTTGACTTAA	GACACATCAT	TTCCTCATGG	AAGTGTTAAA	CAGATCTGTA	31440							
CAATAAGGTT	GGCAATCTTT	GTGTAAAACA	GTTTTTTTC	TCCTGCTCTA	AAGAAAGTGT	31500							
ATATTTCAAA	ATGTGAATGT	CAGCAGTCAG	AAAATAGTAT	ТТТТТТААСТ	TCGTTTTCAA	31560							
AGTCCTCAAA	AACCTGTACC	TAATCATGAA	TTTTTTTTCC	CACAGATTGT	TTCTTCTTCT	31620							
CCCTCCCAGA	AACTTTGAAG	TTTTTCTACA	TGACACCAGG	ACCTATGTCT	ТТТТТААТТ	31680							
ACACAGAAAT	GAAAGAAAAA	AAGTGTGTTG	TATCGTTAAC	CAAATATATG	AAATCTTTAA	31740							
GCTGTATTTT	TATTTTAAC	TTTGTTTTGC	AAAGAGGCCA	TTCCCTTTGG	ТТАААТААТТ	31800							
TGTTATTCAC	AGTTTCCTTG	TCCTCATATT	ATCAAGGGGA	AAATTGTAGA	AATTTTAAAG	31860							
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ACTGAACCTG	TAAGAGAACC	AATCGTGAAG	TCATTACATC	TAAGCATAAG	CAAAATCTCC	31980							
TCTTGGATCA	TTAAGTTATA	GAAGAAAAGA	AAGCCTGCAC	TTTGAAATTT	AGATAAAGCT	32040							
TGGTAACTTG	TAAGTCAAAC	ACGTAAAATT	TTACAATTCA	GGAATATCGA	TAGCAGTTGA	32100							
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AATAGCAGTA	GGCGTTTAAG	AAGAATGAAT	CAACAATTTA	АААСТАТААТ	GTGTTTTTTA	32220							
TTCATCTCCC	TTATTCACAT	ATATTTGTTT	TGTTTTGAGA	AGGAGTTCTG	CTCTGTCGCC	32280							
CAGGCAGGAG	TGCTGTGGCA	CGATCTCAGC	TCACCGCAAC	CTCTGCCTCC	CGGGTTCAAG	32340							
CGATTCTCTT	GCCTCAGCCT	CCTGAGTAGC	TGCGATTACA	GGCGTGCGCC	AGCAACCCCG	32400							
GCTAATTTTT	GTATTTTAG	TAGAGACAGG	GTTTCACCAC	GTTGGACATC	TTGGTCTCGA	32460							
ACCCCTGATC	TCAAGTGATC	AGCCCGCCTC	GGCCTCCCAA	AGTGCTGGGA	TTACAGGCGT	32520							
GAGCCATCAC	TTCTGGCCCT	TATTCGCATA	СААТТТАААА	ATCATCACAG	AAGGTTTGAA	32580							
AGAAGGAAGG	GGCAGAAAAT	TACCTACTTT	TCCTCTCCCC	AGCGATCTCC	TTCAAATCTG	32640							
TGCCTTTTCC	TCAGGCCCAG	GCCTCAATTT	ACTGAGCAGT	CACACCTCAC	AGAGGGAGGT	32700							
		SUBST	SUBSTITUTE SHEET (Rule 26)										

CTGGGCAATC	CACTCTTGGT	CACAGGAAAG	CCATTGACCC	TCCCACTTCC	TCTCCTCCAC	32760
CTTGTTCTCA	ACTCTTGACT	TTGGGCTTTG	TTTCTGTTCA	AGTCCTAGAA	CTGGTTTCTT	32820
TTATCAGGTT	AAGTGATTAG	TTCTCTTTCC	CTCTAGTTGC	TCTCACTCCC	TGACTCTTGC	32880
CTTCTGTAAC	AACTGGAGAC	AACTCTTTCA	AAACCAGCTC	CAAGCCCCAG	ACTTCTCTCT	32940
GGGCTTTAGT	TCGTAAGGCA	GGTGCCCTAC	TGAGTGAGCC	TAGATCAGAC	AGAAACATAG	33000
CTGTTGGCAA	GGATTTAGGT	GAATTTCCTT	CCATTGTTTT	TCTAATACCT	ТТТТТТТТТТТ	33060
TTTGTAAATA	TAACCATGCA	CCTACACACA	TATTTGAATA	TCCTGCCTTT	TTATTTAAAA	33120
TGACATGATA	GGTCCGGGAG	TGGTGGCTCA	TGCCTGTAAT	CCCAGCACTT	TGGGAGGCCG	33180
AGGTGGGCAG	ATCACCTGAG	GTCAGGAGTT	CGAGACCAGC	CTGGCCAACA	TGGTGAAACT	33240
CCATCTCTAC	TAAAAATCAA	AAATTAGCCG	GGCATGGTGG	CAGGCTCCCA	GCTACTCAGG	33300
AGGCTGAGAT	GTGAAAATCG	CTTGAACCCG	GGAGGTAGAG	GTTGCAGTGA	GCTGAGATCT	33360
TGCCATTGCA	TTCCAGCCTG	GGCAATAAGA	GCGAAACTCC	АТСТСААААА	АААААААА	33420
AAAAAGACAG	GATAAACATT	CTAGATAGTC	TCTATAATGG	TCATGATTAA	GACAATAAAA	33480
TAGTCTGAAA	TTGTCAATAT	ATATTAATAA	TAATTTATTT	GGCCATTCTG	CCAAGTAGCA	33540
GACACCTGTC	ATTCTGCCCA	CTCAGCACCT	CTCTTTCTTT	TAGGGAAATG	CTACCCACTC	33600
TTTGCATGGG	TTCTGGATGG	AACTGTTGAT	CACAGTGTTT	TCACTCCCCA	TTTTGCCTCA	33660
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TATTGATCAC	AGTATCACCC	CACTCAAGGC	TTGGTTGGAG	ATGAGCAGAA	GAGACTAAAG	33780
CTGGGTCATT	TTAATTAACA	CCTGTACCCC	AAAGAAAGAC	TGTCAATGAG	GCTTTTATAC	33840
CGACACTCCT	GGTTTCCATT	CTTCCTGATG	CCATTCATTT	GACGAACTAC	CCAATCTTTC	33900
CAACAGTGTC	TTTGGAAGAA	AGATAGTCAG	AAAAGAAGAT	AGAGTTGTTT	TCTGTTCTTT	33960
GCAACCAAGG	AACTCTAAAT	GATAGACTTG	TTGCTAGGCA	CTTTGGTTAT	TTTTATTATC	34020
TTGAATACTT	CTGTGATATA	CTTCTTTGTG	CATGCCTGTT	TGTACGGATG	TAGCTTTTTA	34080
		SUBST	TITUTE SHEET	(Rule 26)		

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TATATTTTAT	ATAATTTCTC	AGAAGTGGAA	TTACTTAGTC	AAAAGGTATG	AACATTTTCT	34140
GATTCTTAAT	ATAAATTGTG	CAAATGCTTT	TTAAGAAGAT	TATACCAGTT	TACATTTTGT	34200
GTTATATATA	ACAGAAAGTA	СТАСТБАААА	ATATTACAAA	AATTGTCTCT	CTGTTCAGGA	34260
GGACTTGTAA	TAGATGATAA	AGTACTTGAA	ATAGGAACAT	AGAGCATTTT	CAGTTTAAAA	34320
ТААТТТСАТТ	GGGTTATTTA	CGGAATCCTT	AGAATTATGG	CCAGACATTT	ATAGATGATC	34380
TGTACCAAAC	CTAGTTGGTT	ACATAAATTG	CTTATTCAAC	TGGCTTAAAT	CTATAATAGA	34440
AAGATGACAC	TTACTGAATG	TTTAATATAC	ACTTTGTCAG	GGGCTTTGTA	TTATTCTATG	34500
ACATCTTCAA	AATGACCCTA	CTTTCCTATT	TTATAAGTAA	GGACAGGAAG	GCTTCAAGAA	34560
CATGACTAAT	TTTCCCAAGG	GCTGTACCAA	AGCCAGAACC	САААТСТАТА	AGGCTTTTAA	34620
ACCTGCATTC	TAAAACTGCA	TCTCGGCCAT	СТТАТТССТА	CAGAACTTAA	GGTTAGAAAG	34680
CCAGATTGGA	GTCCCAATTT	CACCACTTAG	TAACCAGACA	AACTTGAGGA	ATTCACTCAA	34740
CGTCTTTGAA	TCTCCATTTC	СТААТСТТТА	AAACTAAAAC	AATAATACTG	GCCCTACCTA	34800
TTTCCTAAAA	TTTCGTGAGG	CACATAGAGC	TAGTGTGGTA	GAGTGCTGTA	CAGATGTCAA	34860
GTGTTAGCGT	GAATTACTTA	GATCCCTGAA	CACCATGGAT	GAATGTGTCT	GACTGCTATT	34920
AGAGGTCATA	AAGAATATTG	GGGCCAGGTA	CATTGGCTTA	TTCCTATAAT	GCCAGCACTT	34980
TGGGAGCCTG	AGACAGGAGG	ATCACTCGAG	GCCACAATTT	CAAGACCGGC	CTGGGCAACA	35040
TAGTGAGACC	CCTTCTCTAC	ААААААААА	AAGCAGCCAC	GTGTAGTGGC	ACACACCTGT	35100
AGTCCCACAT	ACTCAGGAGG	GTGATTTGGG	AGGATAACTT	TAGTCCAGGA	GTTTCAAGGT	35160
GCAGTGAGCT	GTGATTGCAC	CACTGTACTC	TAACCTGGAC	AGCAGAGTGA	GACCCTGTCT	35220
СТААААААА	AGAAAAAAA	ААТААТААТА	ATAAAGAATA	ATGGGCCTTG	GGATACCCAC	35280
TCCTCTCTTT	CTGCTCTGAG	TTGTGAAGCA	GTTGAGTTAC	ATATGCATGT	CCAATGGATG	35340
AGGTTGAAAA	TATCAACTGG	ATTGGAATGT	GGCTTACTTG	CGTGGCCACA	ATGAGCTTCG	35400
TAACACTTCC	TGACAGGGTG	AGAAGACAAA	CTTCCTCACC	CAGTCACTGG	CAGAGCTGGA	35460
		or re or		(D. 1. 0.6)		

CACTCTGTGT	CTCTCCCACA	GAACAACCTC	TTACTGCATG	GAGGTGGATG	AAAAAGTCAA	35520
CCGAGAACAG	GCTACTCCAA	AAAGCAGAGC	ACCAAAGGCA	CCAGCTGGTC	AGGTCCCCCT	35580
TCCTAAGTAA	ACAATCACGT	AATTCATTCG	GGACAAAGCC	AGAGAGGTGG	TGTGGAGAAA	35640
GAGAGGGCAG	TTTCCTCCCA	AGTTTTTCCT	GGAATTCTTT	ATGGGAATAT	GAGGTTTAGG	35700
GGAATAAGAC	TTCCCTTTAA	CAGTGAAGAA	TCCCCAGCTC	TATTGGTAAT	AGGAAATCGC	35760
TTACAAGGAT	CATGGGGAGT	ATTTCCTCAG	CTCGTTCTGC	CTCCTACTTG	GCTGAGTGGA	35820
ATGGAACCAT	CTGTGGCTGC	TGCATATGAT	ATTGTCAACT	TTGTCATTCC	ACACCCACTC	35880
CTTGACGCCC	TACCATGTGG	TCATAAGACT	CCCTTTAAAG	TGTTCCTTTA	AAAAACAAAA	35940
TGTGTTTTGT	ТТСТАТАААА	TACAGCTCAA	TGTCAGAACC	CTTGTCTTGT	TTGCTCTCTG	36000
ATGTAACCCT	TTCACAATGT	TTGGGCAGCT	TATTCTCTCT	ATTTCCCTGT	AGGGTCCCAT	36060
CCAGGCCAAA	GTGAGTGCCA	GCCTCATTTG	GGCAGCACAT	GCCCTGTGGA	AGGGCAGGAA	36120
GAGACGAAAG	CTAATTGTAA	CTTTGTGATT	AGCTGTCATG	GATGCCTGGT	CCTGTCAATA	36180
GCGCTCAATA	AAGCCAGAAG	GCCAAGCGTT	CGCTTCTGCA	TACTGATTGC	TGAGTCAGAT	36240
TTCTCAGTGC	AGAAGGGCTT	TCTAGGCAGT	CAATTTTAGA	ATATTAGTCT	TGGTTCTTAA	36300
GTGGTTAAAA	TCCCTAGCTG	GTCTTTAATC	TGAGCCTGGA	GAATTTAGTT	AGGGCTGACA	36360
TTCTGCTGTG	ATATTTTTGC	CCTCAATATA	TATGTCTTTC	CTCCATCTCT	TAGATCCCTG	36420
AATCATAGAG	ATATATATGT	TATATAATCA	ACTGTCTCCA	GTCTCTAAGA	GTGATAAGTA	36480
CACATTGTGT	CAGGTTGAGG	GGACAGGAGA	ACTTTCAAAA	GCCTTTCTTG	CCCCTTTTTC	36540
CTTCTCACTG	CCTCCCACTA	AGTCCAGCCA	CTTATTATTC	AGCTGACACT	ATCATCATGA	36600
CCATGAGTCT	TTTGGGGCTA	CCCTGGTTCG	GATCCTTTTG	GAGGTTTGTT	GCTTAACTCT	36660
GTCTTCAGTC	CTATGGAGCT	GCTTTTTCAA	TAAGTTTCTA	TTTTGGCTAA	AGTTGGCCAG	36720
AATCTCCTTG	TAACCAAAGA	АСАААТАААА	TACCAGCTTG	CAATGTTCTA	TGTTGCTTCC	36780
ACCAAACTTA	TGCAGCACTT		CCACCTACTA		ТТТТТАТТТТ	36840
		OV ID CO	CONTRACTOR CONTRACTOR	(Dada 26)		

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TTTGGAGACG	GAGTCTCGCT	CTGTTGCTCA	GGATGGAGTG	CAATGGTGCA	ATCTCGGCTC	36900
ACTGCAACCT	CTGCCTCCCG	GGTTCAAGCA	ATTCCCCGGC	CTCAGCCTCC	TGAGTAGCTG	36960
GGACTACAGG	TGCATGCCAC	CACGTCCGGC	TAATTTTGT	ATTTTAGGAG	AGAGAGGGTT	37020
TCACCATGTT	GCCCAGGCTG	GTCACGAACT	CCTGAGCTCA	GGCAATCCGC	CCTCCTCGGG	37080
CTCCCAAAGT	GCTGGGATTA	CAGGAGTGAG	CCACCTCACC	TGGCCCCGAC	CTACTAGTCT	37140
TTAGTGTTTG	CTTCCTTCTA	TTGGGTAATT	GTCTGTTTAT	ATGCATGTCT	TGTTTCCTCA	37200
AATAAAATGT	GGTCTTCTCA	AGGGTATTGG	CCCATGTTCT	ATCCATCTGT	AGATATCACA	37260
GCACCTAGCA	GTGTCTTTCA	CAGAGGAAGT	ACACAACTGG	CATTATTGAT	TCATTGCTCC	37320
ATTTTTTCCT	TCTTTATCCC	CAGCATTTCT	CAATAATTTC	AAACATCTCC	ATTGGAGTAC	37380
CGGAGAAAGC	AGGTAGCTTT	ACTTGCAGCT	ATGTTTCTAT	CCCCATAGTA	ACTAAAAGAG	37440
GACCCAGAGA	AACATGTTTA	AATGCTGTCC	TGTTATCAGG	ACCTCAGCCT	TCTGATGCTC	37500
CGTGGCTTGG	GGGTTAATGC	TTGATCATTT	CCTCCCCAAC	CTACACTGTG	TACCTATGCT	37560
AGTCTCTTCA	TGAGGACTAA	GCCCCATAGT	AAAAGGGCTA	GATAAATAGA	AAATCATTTT	37620
ATGTAATTAT	AAGAATGAGA	ATACTGAGTA	TTACTGGTGT	TTGTTTAGGA	TAAGCACATC	37680
TTTATTTGTA	TGAGAAAAAG	AAAAAGAGAG	TGAAAAATAT	ATTAACGTGC	ATATAGTTCA	37740
GGACCATGGA	TTGCAAGTGA	CAGAAACTCA	ATTCAAACCA	ACGTAAGTCA	AAAGGAAAAT	37800
ATATTGGCTC	ATGTAACCTT	CTCACAGAGA	GGGCAGGATG	GAAGGGGCTT	TGGGAACAAG	37860
AGAATTGTTC	TCAAATTCTA	GGAATACTAG	GATTAGTCCA	GGATGGGTCA	CCTTCCTGTC	37920
CCTGAGGTGG	TGGTAGCGAT	GGTAGAGTCT	TATGGGAGGA	AAGAGTGCAT	GTTAGGATGA	37980
AGGTAGGGCT	AAGCAAACAA	GGGCAAGGGC	CACTATATCA	TGCTAAAAAT	GGTTTTTTT	38040
GATGTCTTCC	TTAATTTCAC	AAATGCTTCC	AACAAAGTAG	CACACAGGAA	AAAGAACATA	38100
GGGACTCTAC	TGGTGGGTGC	ТТТТАТСТТА	AGCCTTGTAC	TTGCTTTTCA	CAGCTTACTC	38160
ACTGCTTGTA	CCTGAGGCCA	TATGCCCTGT	AAAAGCTTCT	GCAGGGTTTC	TACTAAGCTG	38220
		A	THE PROPERTY OF THE PARTY.	(D. 1. 26)		

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GGTTCCTTAT ATGGCTCTCT CCCATTTCTG TTGCCTCACT CTAGTGATCT TTCTCTTTTC 38280 CTCACCTCTG GGACTGGTGG CTGTTTGTAT GGACTGCCTT AGCTTTGCTT TGGGTTTTTT 38340 CCTGGGGACA ATGTCTTCAG ATTATCCTAG ACCAAATAAA CTACAGCCAC TGGGCCAGGC 38400 TCTTCCTCCT CCAACTGGAC CATGTTCCCA GGGCTCTTCA CCTTAGTTTA GGTCAAGCAT 38460 TCTTGGCAAA AGAAAGGCCT AGTTAACAAT AGACATTCTA GCAATTGATT CTTTTTGACA 38520 TGTTGTAAGA TCTATTCACA TTTTGTAATT AAAGCATTCC CCTATGGAAA CCAACACGAA 38580 CTAAGCTGCT CCTGGAATGC AGGGTGGCCT CCTCAATACA GGATGTTCTA GAGAGCTGTA 38640 TTTTGGGCAC TTAACTATTC TCCACTACTT AGGGCACAGC ACTGAAATTA ACACCACTAA 38700 GTTTGTCATG TCCATGTAGT TAGTCTCAGG CAGTGCAGCC TCAGGAGTGG AACTGACCTC 38760 TTATGTGTGT CCAGCCTTTC TTCCTTCAGA AGTCAGCTGT GTTTTCTGCT GACTCTCCAT 38820 AGGAACATCA GTCCTGAATC CTCAGACCAC CATCTGGAGT AGTAAGTGCT CCTGACAGTC 38880 CTAGAAGTTG TCTACCGCTG GATCTCCAAA GCGTGTGACA CACCGTGAGA GAGAAATGAG 38940 AAAGCTGGGC TCTTCAGGTA AATCTTGCTT TTTCACAAGC CCCCTAATTT TACTGCATAA 39000 TTATTTTGAA TTCACTGATA ATTTCTACAA TTTTCCCATA AGTCATCTAC ACACAATACC 39060 CTCTCATGCA ACACTTGGCT TTGCTAATAC ATATCTATTA TGAGAGCTGT GCTTCTTAAG 39120 CGTAAATGTT TTATATGCAC TAAGGCTCTT GGCTTACATA TAAAAGGGGT ATTGAGCAAT 39180 GTGATACAGA AGTCTTTTCT CCACAGGTCT CATATGTAAA GAATTCATTA GATTGGCTGA 39240 AATAGACTGA TCTGTCCATT TCTCTGCTCA CTTATCATAA GGAAGTCATT AGCTAAGGAA 39300 CAAAAACTAC AATCTATGTA ATTAGAAGAA CAAGCTGGTT TTGCTCAATA TAAAAATAAG 39360 AAAAAGAAAC CATGTGAAAG TCAAAATATT TGTTTAATCA GGTCATTGAG AATCTATTAA 39420 AAAGTATTTG AATTCTTTAT GATGAGAACT ATCTTGACTC AAGTGGACAG TGGTGAGCTT 39480 TTTGGCCTGT GGTCCCTACG TAGAAAGGAG GCTTTGTCAT AAAGTCTTAT ATGGTACAGG 39540 TGCCAAGTTA AGTGCCCAAG CTTGCTCTTA AAAGCATACT GGATTTTGTT TTAGACTTTT 39600

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AGTGAACTGA AGGGAATAAA CAAATCCCTC TGGGAGAACT TCTCCTCCAT CCTTGGTGAA 39660
GTCATTCTGC CAGAATTC 39678

(2) INFORMATION FOR SEQ ID NO:4a:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 41008 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4a:

TGGTTGATTT GTNNATAAGG AAGTTTGGAA TCAATCCCGG AAGGAATTTT TTTTTTAAAA 60 AATTTTTTGG AAGGGTTTGG TAWTAAAAAA RCCAATTTGG GTTTTTAAAA ATAGGAATTT 120 TATGGGAAAA AATTTTCCCT TTTTTTTTT TTAAGTTTTA GATGTTATGT TTCCTTATAC 180 TTAAAGTGGG TGTCTTATAG GCAGCATATA TCTGGGTCTT GATGTATTAT TTAATCTGAT 240 AATCTCAACC TTTTTGTTGG AGTGTTTAGG CCATTTACAT TTAGTGTAAT TATAGACATG 300 GTTTGATTTG CTATACCATC TTTTCATTTG TTTTATATGT GAGCCATCTT TTCATTGTTC 360 TTTTTTCATC TTTGACCATT TTCTTTAGTA CTGAATACTT TTTTTTGTATT TCATTATATC 420 480 TATACATCTT TAACTTATCA CAGATTACCT TCAAATAGTA TTTTACCAGC TCAAGTGTAA 540 TGTAGAAACC TTACAAGAGT ATATTTTCAT TTCTGTCTCC TAATTTTTAT GCTATTGTCT 600 ATAATACATT AGGTTTGTTG TTGTTTGTTT TTACCTTATT GCTGTTGGCT GGGGTCAGCA 660 AACATTTTCT GTAAAGGGCT AGATAGTACA GGCATACCTT GGAGATACTG TGGGTTTGGT 720 TCCATACCAC CACAATAATA CAAATATGCA AGAAGTGGAT ATCACAATAA AGTGAGTCAC 780 ACAAGTCTTT TGGCTTCCCA GTGCATATAA AAGTTTTGCT TATACTACAC TGTAGTCTGT 840

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TCAGTGTGCA ATAGTGTTAT GTCTAAAAAA ACACATACCT TAATTTTAAA ATGCTTTATT 900 ACTAAAAAAT GCTAACAATC ATTTGAGCAT TCAGTGAGTT GTAATCTTTT TGCTGGTGGA 960 AGGTCTTTTC TTATTGATGA CTGATCGGGG GTCAGGTGCT GAAGCTTAGG GTGGCTGTGG 1020 CAGTTTCTTA AAACAACAGT GAAGATTGCA ATATCAGTTG ACTCTTCCTT TCATGAAAGA 1080 TTTCTCTCTA GTGTGTGATG CTTTTTGATA GCATTTTATG CACAGTAGAA CTTCTTTGAA 1140 AATTGGAGTC AATCCTCTCA AACCCTGCTC TGCTTTAACA ACCTAAGTTA ATATAATATT 1200 CTGAATCCAT TGTTGTCATT TCAACAATTT TCACAGTGTC TTCACCAGGA GTAGATTCCA 1260 TCTCATTTCC TGAGATGGAA TCTTTGCTCA TCCATAAGAA GAAATTCCTC ATCTGTTCAA 1320 GTTTTATCAT GAGATTGCAG CAATACAGTC ATGTCTTCAG GCCTCACTTC ACTTTTAATT 1380 CCAGTTCTCT TGCTGTTTCT ACCACATCTG TGGTTCCTTC CTCCATTGAA GTCTTGAACC 1440 TCTCCAAGTC ATCCATGAGG GCTGGAATCG ACTTCTTCCA AATTCCTGTT AATATTTATA 1500 TTTTGACCTC CCATGAATCA TGAATGTTCT TAATGGCACC TGGAATGGTG AATCCTTTCC 1560 AAAAGGTTTT CAATTTACTT AGTCCAGATC CATCCATCCA GAGGATCCAC TTTCAATGCC 1620 AGTTATAGCC TTATGGAATG TATTTCTTCA ATAATAAGGC TTGAAAGTTG AAATTACTCC 1680 TTGATCCATT TTCTGCAAAA TAGATGTTGT GTTAGCAGGC ATGAAAGCAA CATTAATCTT 1740 TTTGTACATG TCCATCAGAG CTCTTGGGTG ACCAGGTATA TTGCCAGTGA GCAGTAATAC 1800 TTTGAAAGGA ATTATTTTC TTAGCAGTAG GTCTCAACAA TGGGCTTAAA ATATTTGGTC 1860 CACCATTCTG TAAACTGATG TGCTGTCATC TAAACTTTGT AGTTTCATTT ATAGAGCACA 1920 GGCAGAGTAG ATGTAGCATA ATTCTTAAGG GACTTAGGAT TTTCAGAATG GTAAATGAAC 1980 ATTGGCATCA ATTTAAATCA CTAGCTGTAT TAGCCCCCAA CAAGAGAGTC AGCCTATTTT 2040 TTGAAGCTTT GAAGCCAAGC GTCGACTTCT CCTCCCTGGT TACAAAAGTC CTAAATGGCA 2100 TCTTCTTCCA ATATAAGGCT GTTTTATCTA CATTGAAAAT CTGTTGTTTA GTGTAGCCAC 2160 CTTCATCAAT GATACTATCT AAATCTCTTG GATAACTTGT GCAGCTTCTA CATCAGCATT 2220

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TGCTACTTCA CCTTGTACTC TTATGTAATG GAGTGGCATC TTTCCTCGTA CCTCATGAAC 2280 CAACCTCTGC TAGCTTCCAA CTTTTCTTCT GTAGTTTCCT CGCCTCTCTC AGCCTTCATA 2340 GACTTGAGGA TAGTTAGAGA CTTGCTTTGG ATTAGATTTT GGCTTCAGGA AATGTTGTGG 2400 CTGGTTTGAT CTTCTATCCA GACCACTAAA ACTTTATCCA TATCAGCAAT AAGGCTGTTT 2460 TGCTTTCTTA TTATTTGTGT GTTCACTGGA GTAGCACTTT TAATTTGCTT CAAGATATAT 2520 TTCTTTGCAT TCACAACTTG GCTGACTGGT GCAAGAGGCC TAGCTTTCAG ACTATCTTGG 2580 CTTTTGACAT GCCTTCCTCA CTAAGCTTAA TCATTTCTAG CTTTTGATTT AAAATGAGAG 2640 ATGTAGGCCA GGCACAGTGG CAGGCACAGT GGCATATGCC TGTAATTCCA ACACATTAAG 2700 AGGCCAAGGT GGGAGGATTG CTTGAACCCA GGAGGTGGAG GTTGTAGAGA TCACACCACT 2760 GCATTCCGTC CTGGATGACA GAGCAAGACC CTTTCTCAAA ATAAAATGAG AGGTGTGCTT 2820 CTTCTTTTG TTTGAGCCCA TAGAAGCCAT AGTATGATTT TTAATTGGCC TAATTTCAAT 2880 ACTGTTGTGT CTCAGAGAAT AGGGAGGTCT GAAGAGAGGG AGAGAGGTGG GGGAATGGCT 2940 GGTCAGTGGA GCAGTCAGAA CACACATAAC ACTAATAAAT TGTTTGCTGT CTTATATGGA 3000 TGTGGTTTGT GATGCCCCCA AACAATTACA ATAGTTACAG CAAATATCAC TGATCACAGA 3060 TCACCATAAC AGATATAAGA ATCATGGAAA AGTTTGAAAT ATTTTGAGAA TTAGCAAAGT 3120 GTGACACAGA GAAACAAAGT GAGCACATGC TGTTGGAAAA AATTGGTGTT GATAGACTTG 3180 CTCCATGTAA GTTTGCCATA CGCCTTCAAT TTATAAAAAA CACAATATCT AGGAAGTTCA 3240 ATAAAGTGAA GTGCAATAAG ATGAAGTATG CCTGTAAATA TTTCAGGCTT TCCAGACCAT 3300 AGGGTTTCTG TTGCAACTGC TCACCTCTGC CATTATAGCA TGAAAGCAGC TATAGAAAAT 3360 ATACATAAAT GAGGCCTGTA ATCCCAACAC TTTGGGAGCC CAAGGTGGAT GGATCACTTG 3420 AGGTCAGGAA TTCGAGACCA GCTTGGCCAA CATGGCAAAA CCCCGTCTCT ACTAAAAATA 3480 CAAAAATGAG CCAGGACTAC GCATGCCTGT AGTCCCAGCT ACTTGGGAGG CTGAGGCAGG 3540 AGAATCTCTT GAACCCGGGA AGGGGAGGTT ACAGTGAGCC AAGATTGTGC CACTGCACTC 3600

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CAGCCTGGGC	AACAGAGTGA	GACTGTCTCA	САААААААА	AAAAGGAAAA	GAAAATACAC	3660
ATAAATGAAT	GTATGTGGCT	GTGTACCAGT	ATATCCTCAT	GCTCTAGCTT	GCCAACCCTT	3720
GCTTTACACT	GTCAGTTACC	TTCTAAAGAG	ATTAAAAATC	АТААСААТАТ	CTATTACGTT	3780
TATTCACATC	CTAGTGTCAT	TTCTTCCTTA	TGTAGAATCA	AATTTCATTC	TGGTATCATA	3840
TTTCTTCTTT	CTAAATAATT	TCCTTTAATA	TTTTTTATAG	CACAGGTCTA	ATAGCAATGC	3900
ATTATGCAAT	TCATTGCTAT	TAGACCTGTG	СТАТААААТА	GCAATGAATT	ATGTCAGTTT	3960
TTATTTGTCT	GAAAAAGTTT	TTTGTTTTTG	AAATATACTT	TTGCTGGGTA	TATAAATCCA	4020
TGTTGCATAA	CTTCTCTTTT	CTTCAGCACT	TTAATGAAGT	CACTCAGTTA	TCTTCTGGCT	4080
TGTATAGTTT	CTCTGGCTGC	CTTCAAGATT	TTTTCATTGT	CTTTAATTTT	TAGCAGTTTG	4140
ATGTGTCTAG	GAGTGATTTT	CTTTGTATTT	ATCCTTTTGG	GGGCCTCTTA	ATTTCTTTGA	4200
TCCTTTTTT	CTTTTTTTT	TTTTTTAAAC	CATTTTGGGT	CTTTCCCCCC	ATTTGGGGTG	4260
ААААААААА	AAAAATAAAA	TCATAGTTTA	АААААСТААТ	TTTGGAAAAT	TTTCAGCTAT	4320
CATTTCTTCA	AATATTTATC	CTACTCTATG	CTCCCCTCCT	CCCCTTTCCT	TCTGTGACTC	4380
AAATTACAGG	TATATTTAAC	CATTTTATTT	GTTCACGGCA	CTTGGATGCT	CTGCTTTCTT	4440
ATTTTTTGTC	TTTCATTTTG	GATAATTTCT	ACTGACCTAT	CTTCAAGTTC	ACTGATTCTT	4500
TTCTCAGTCA	TGTCTAGTGT	GCTCAACGCC	TGTTGAAGAA	ATCCTTTGTC	TTTAATATCA	4560
TGTTTTTAT	TTCTAGCATT	TTCATGTAAC	TCTTTGTTCT	GGTTTCCATC	TCTCTACTCA	4620
CTTTTTTTT	TTTTTTTT	ТТТТТТТ ТТТТТ	TTTTTTTAGA	CAGAGTCTCG	CTCTGTCACC	4680
CAGGCTGGAG	TGTAGTGGCG	CGATCTCGGC	TCACTGCAAC	TTCCGTCCCC	TGGGTTCAAG	4740
TGATTCTCCT	GCCTCATCCT	CCCGAATAGT	TGGAATTACA	GGTGCCCACC	ACCGTGGCTG	4800
GCTAATTTTT	GTATTTTTT	AGTGGAAACA	GGGTTTCACC	ATGTTGGCCA	GGCTGGTCTT	4860
GAATTCCTGA	CCTCAGGTGA	TCCACCTGCC	TCAGCCTCCC	CAATTGCTGA	AATTACTGGC	4920
ATGAGGCACT	GCACCCAGCT	CTGCTGACAT	TTTTTATCTT	TTGCTGCATT	TTGTCTACCT	4980

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TTTCCATGAA ATCCTTTAAC ATAGTAGTCA TAATTACTTT CAATTCCTTG TCTGACAGTT 5040 CTGACATTCA AGTCTAGGTC TGTTAATACT TTGTGAATCT GTTAACAGCT TTTTTTCATT 5100 CTTGTCTGTG TGTTTTGTAT TTCTTGATTG TATGCCAAAT ATTGCCTGTA AAATAAACTT 5160 AGATAAGTCA TACTTCTATC CAGAAATAGC ACATTTTTTG TGTCCAGTCA TTATGTGGAG 5220 GAGTTGGGGC AGTCTATCAG TGGCTGAACT AGTTTGGATT TGTTGATGCT ATACTTAGAA 5280 TGCACCAGAC TTCCATTCAC TGCAAGAGTG GGCTGCTGCG CTTTGTGATT CATGTGAGGC 5340 CTGAATTGTG GAAGGGTTTT TCCTTAGTGT GTCCCTCCAT GCTCAGATTT CAGCAAGTCT 5400 TCATATCTGT GCCACAGAAG GAATCTGACC CATGCTCTTT TTGACCTCCC CAAGTGATCA 5460 ACTGTTGCTT GTTATAGCTT GTCATGGAGT AAGAGGGTGT TTTTTTAGTT TTCATCCTCC 5520 AGCCTTGGTC TTGGGCCCTG AGCTCCTAGA CTCCAGGAGT GGATGGAATC CAGTGATTTC 5580 TCAGTAATTC AGCCCCTTCT CCAGTAGTGG CAGATCTCTG CTTTGTATCA GTGCAAGATC 5640 CTGGGCTGAG CTCATTTTCT GCCCTTCCTC GAGTGGCAGA CAGCTCTTGC TTTCACCCTT 5700 CTACCAAAGG CAGTGCATCT TTTCTTGGGC CTCTCCCCAT TGAACTTATG ACTTTCACAT 5760 AAGAGAAGGG CTCATGTATC AGAGAATTCT GTGACTTTGT GCCACATACA GAGTCTCTCA 5820 GTTCTCTTGC CCTGCCCCAG TCTTTTTTGT GAGCACCTAG TAGAGACCCT TGGAGAAGAG 5880 CAAGGAAGCG AGTATGGACT TCTTTTGTGT CTGTCGATTG CTTTGTTTCT CAACTGCTAC 5940 TCTTGGACTT TAAGAATTCA TTAAAATTTC AGCTGTTTTC TTTTTTTCTT TCGTTTTTCT 6000. TTTTTTTT TTTTTTTT AGATGGAGTC TTGCTCTGTT GCCCAGGCTG GAGTGCAGTG 6060 GTGTGATCTT GGCTTGCTGC AACCTCCGCC TCCCGGGTTC AAGCGATTCT CCTGCCTCAG 6120 CCTCCCAAGT AGTTGGGATT ACAGGTGCCC ACCACCACAC CTGGCTAATT TTTGTATTTT 6180 TAGTAGACAC AGGGTTTCAC CATTTTGGTC AGGCTTGTCT CAAACTCCTG ACCTCATGAT 6240 CTGCCCGCCT CAGCCTCCCA AAGTGCTGGG ATTACAGGCA TGAGCCACCG CGCCAGGCCT 6300 CAGCTGTTCT CTTTTTACCT GCTGGGATGG CTAGTTTTCT GTGTCAACTT GACTGGGCCA 6360

TGGGATGTCC AGATATGTAA TTAAACAGTA TTTCTGGGTG TTTCTGTGAG GGTGTCTTCA 6420 GAAGAGATTT GCATTTGAAT TGGTGAACTA AGTAAAGCAG AGGGCCCTGT CTAGTAGGGG 6480 TAGGCATCAT CCAGTCTGTT GAGGACTTGA ATAGAACAAA AGGCAGGGGA AGGTTGGAAT 6540 TGCCCCCTCT CTGCTTGAGC TGAGACATCT ATCCTGCCCT TGGCACTCCT GGTTCTCAGG 6600 GGTTCAGACC TGGATTCCTG GTCTCCACCT TGCCCATGGC AGACTGTGGG ACTTCTCAGC 6660 6720 ACACACACA ACACACCCTA TGTATCCTTC TGTTTTTCTG CAGAACCATA TTTAATACAC 6780 CTGCTTTTAT GACGATTACC TATCGATTCT GTATTCTGCC AAAACTGAAA ACAGTTCATT 6840 TTTCCATCTC TTCTCAGAGA GGCTTGTCAG CCATTAGTTC TCTGATGGGC TCAAGAAGTT 6900 ATGCAGTTTT TTTTTCTCA CTGTTAGGAT GGAATTGATA TTCTGTTGAA ACTTTCTATA 6960 CCTAAGTGGA AACTTGTTTT GAGGTTATTT TCTCTACTTA CTTTTGCTGG AAATGGAACA 7020 CTCTGTATCT AGTTAAGACA CATAAACTGA CTTGTGATAC CATAATGTTG TGTTGAATTT 7080 TATATTCTTA GAAAATCATC TGTCAAGGTG TTAACTAATG GCAAAGCATT TAATAAATCA 7140 GCATTCATGT ATTCAGGTGC TCTGAATTAT CTGACTTTTA AATTCTTACT TTATAAATGA 7200 GAAAATTGGG GCATGGAAAA GTTAACTCTC CTAACCCCGA ATTATTACAT TATTAAGGAC 7260 AGGACTTAGA GGCCAGATAT CTTAAGTCAT TAATATTCTT TGGCTCACAG AATTGGCAGT 7320 ATAACCTAAA GGTAATAACT AGGTGATTTT CTTTTATATC AATTAAATAT GTCAGTTTTC 7380 AAATATTCAT AAGTACCTAC TGTGCAGGGA AAGAACATGC CATACAAAAG ATGTAGTCCA 7440 GGCCTTTAAG AAACTTTCAT TTAATGGGAA CTCAAGAAGT GTACATATAA GGAGGGAAGT 7500 AGCAGTATGG TACAAGATAA TACATACATA TCAGTGAATG ATATTGCCAA AAAGTGCTAT 7560 TGATAGAGCA ATAATTCATT TCTGCAAACA GCTGCTGATC TCCTACTGAA AACAGAGGAG 7620 GGAGAACAGG ACGCCTCGTG GTCAGGATAG AAGAGAAAGA CCTTGAGTTG AGCCTTGAAC 7680 AGTATTTAAT ATTCAAAAGG TTAAGAGAGG AGAGCAATTG AGGAGGGGAG AATAGTTCCA 7740

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GCACAAATGA TGGTGTACAA GATGAACACA GTCAGTAAAG AGCAGACTGG TCTGGATGGA 7800 GAGGAGGATT TGCATCATTT GGGATTACGT CATTTAGACC CTTGAAAGCC AGGATTGAGT 7860 AAAGCCACAG TGAAGCGACT GGCTCGTATG GAAGCTTTAT TTTAAGAAGA TTAATCTGGT 7920 AGTGACATGT GCCAAAAACT GAATAGGTAG AAATGAGATG CAGAGAGCCC AGTTAGAACT 7980 AAGTCTGGTG CAGTAATGCA GGATTGAGGC AATAAACACC AAACTACAGT ATCACCAGAT 8040 AATGGATGTT TGAACGGACG GTTTAAAGGA AAATTGATGG TATTTGGTAA TTTATTAGAT 8100 AATCCAGGGC CATGGAATGA GAGGGGAAAA TGACTAACCA TAGTCATCAA ATGGTTTTTC 8160 TTAATGAATC TGAATTTTGG TGTAAGAGCA ACATTTTCTT AGGCCTTGCC TAGTTGGTAC 8220 AGCTGACTAT GATAATGACT GCTACCATGC TTGTTCCTCT TTTAGCAGCT GTGAGTCCCC 8280 CACCAGCCAA ACAATGAGCC TCTTGAAAAG GACGATGCCT TTTCACTTCT CTCCAAGTGC 8340 TTGGCAAATA GGAGGCCTTT TGAAGTTACT TTATAGTTAG GGGTTCCCAG TGAGTATTTG 8400 AAATATTAAG TCATGCCCGT GGTTGACAGC ATGGCCCTAC TGCTCATCAT CAGCTATTAA 8460 CCTTAGGCAA GTTAATGAAC TTTTCTAAGC CCCAGTCTAC TCATTTATAA AGTGGGATTA 8520 TTAATAATGT CTACTTCATA AAATTATGAA GCCTGAGTTA GGTCATTCAG ATAGTGTTTA 8580 GTCTGATTCT TCGAACCTAG TAAACAGTCA GTAAACAGAA GCAAATGCCA CATGCCTGAT 8640 TTATATCCAA GGGGAGAAAG GTAAAAGTGA AATTTTCATG ATTTATGGAT TCAAATTATA 8700 CATTTCAAAG ATGCTTTATA AGCTATTGTT TTGGTAAGAA GAATTGAGCT GAAACAGAAT 8760 TTTCTGACAG CAGTGATTAT TAAATGGTGA AATAGGCTAT TGATGTCTTT AGAGGATATA 8820 GATGTTCACC TTTTGCATAT AAGTGCACAA AAATTCACTA AGTAGATATG TCTGTCTACA 8880 8940 TGAGACAGGG TCTTACTCTG TTGCCTAGGC TGGAGTGCAG TGGTGCAATC GTGGCTCACT 9000 GCAGTCTCAA CATCCTGGGC TCAAGCGATC CTCTCGCTCA GCCTCCTGAG TAGCTGAGGT 9060 GTGCACCACC ACACCCGGCT AATTTTTAAA TTTTTTTATT GTAAAGGTGA GGTTTCACCA 9120

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TGTTGCCCAG	GTCTCAAACT	CCTGAGCTCA	AGCAATCTGC	TCACTTCAGC	CTCCAAAAAT	9180
GCTGGGATTA	CAGGCGTGAG	CCACCACGCC	TGGCCAGTAA	ACCCCATTCA	TTTACATCAT	9240
CTTACTTGTC	CCTCCAAAAT	CCTGCAAAGT	AGGTAGGTTC	TGTCTTTATT	TGTTATTTAG	9300
GTGAAGAACT	TGAAGTGGTG	TTGAGGAATA	GGTGTTTTGC	CAAGAGTCAC	GCAGCTGGAG	9360
TGGCAGAGCT	GTATACTCTT	CTGATTCCAC	CAACGCTGTT	TACATCACAT	CTGGAGAAAA	9420
GTGCTCTGAG	GCACAGATGT	TTAGTGGGAG	GGATGAGACA	CAGGCTGCAA	TGCCTAAAGA	9480
TAATCGGGAA	TAAAAGCAGA	AAACAAGACG	TTTGTTTCTG	TTAAAATGAG	ACAGAAAATA	9540
AGGCGTTTGT	TGTTTGGGAT	TGAGCACTTG	GAGAAGTGGG	GAGCGATTTG	ATTTGGGTGA	9600
GACTGCTCCT	GGAATGCTGC	ATCTGGTTCT	GGACTACTCA	TTACTAGGCT	TATAGAAACT	9660
AGCTGGAGGA	GGTTCAAAGA	AAAGCTCCAA	AATGATTAGC	GGGCTGACGG	GATTGATTTA	9720
TAAGAAATAT	TAAAAGAATT	AAATGTGTAT	AGCTCAGCTA	AGCAAAGATG	AAAGAGACCA	9780
GCTAAATGTA	TACAAATATC	TGAAACGTGC	AAACTTTAAA	AAGAGAGATT	AATTATTAA	9840
CATGATACAC	GGGGCACAA	TATGCAGTCA	CAGGATGAAA	ATTTCAGCTG	AGTATCTAGA	9900
AGAATTCCCC	GATAGTGAAT	CTGTTAAGGC	TGTCTGTAGT	GTGGCCTTTC	CCTGGAGAGG	9960
CAATAGAAAT	TTCAAGTCTT	ACGATTTTAA	AAGTTTCTTG	GGAACTAGGT	ATTAGATGAT	10020
GTTAGAGAAT	ТАТТАТТААТ	TTGGTCAGGT	ATGATAATGG	TATTGTAGTT	CTATAAGAAA	10080
AATTGTATTT	TTTAGAGTTA	CATACCCTGA	AATATAAGCA	TAGAATATGA	TGTAGGAGAT	10140
TTGCTTTAAA	ATACCACAGT	AAGGAAAGAA	AGGAAGGAGG	AAGAAAAGAA	AGGAAGGGGA	10200
AGAAAGGGAA	AAAGAGGCAA	AGAAGGAAGA	GAAGGTAAGA	GAAAGAAAAA	GAATGAAGGA	10260
AGAAGGCTGG	GCACTGTGGC	TCATGCCTAT	AATCCCAGCA	TTTAGGAGGC	CAAGTTGGGA	10320
GGATCACTTA	ATTAAGCCCA	GGAGTTCAAG	GCTGCAGTGA	GCTGTGATTG	CGCCACTGCA	10380
CTCCAGCCTG	GGTGGCAGAG	TGAAGCCCTG	TCTCTAAAAA	AAAAAAATAA	GTTAAAAAGA	10440
AAGAAAAGGA	TAGATGAAGT				AGGAAGTTAA	10500
		Parite	rittitte sheet	(Rule 76)		

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TATGTGAGTT	CACTTTCCTC	TTCAGTCTTC	TTTATGTATG	TTTGCCAACT	ТТСАТААТАА	10560
ACAATTTAAA	TTATATTTTC	CTGATCAAAA	CTTAGTAGCA	GTATTAATCC	CTGGGCTTCC	10620
TGACTAGAAC	AGCCTCATTA	CCACATGGGC	AGAGTTCTGG	CCGACCAGGG	ACCACGTAGT	10680
GGTTCACCAT	CTTGCTCTGG	TAATGTGGTC	TGGGCTGAAG	GGCCCTTTCT	AAGGTTGTAG	10740
ATAGAAATCC	AGGAAACTTG	TTAGAACTGC	AGACCTATCA	GGGTACCTGC	AGGAGGTGAG	10800
TCTACTAAGG	TGAAAAAGCA	GAGGGCAGAG	GTCGTGATTA	GCAGCTGACC	GCCCCTGCT	10860
TTTCTGTCCC	TCATTCGTGG	AAAATTGAGT	GGAGCTCAAT	TTTGAGTGGA	GCTCTAAGTA	10920
GCTCCACTTG	TAGACATTGA	GTGGAGCTCT	AAGTGTCTTC	AGAATAGCAA	AACACTAGTT	10980
TTCTTTTTCT	ТТТСТТТТТТ	TTTTTTTGGG	AGACAGAGTC	TTGGTCTGTC	CCCCAGGCTG	11040
GAGTGCAATG	GCACGATCTC	CGCTCACTGA	ACTCTGCCTC	CCGGGTTCAA	GCGACTCTCC	11100
TGCCTCAGCC	TCCCGAGTAG	CTGGGATTAC	AGGTGCCCAC	CACCACGCCC	AGCTAATTTT	11160
CCTATTTTTA	GTAGAGATGA	GGTTTCACCG	TGTTGGCCAG	GCTGGTCTCA	AACTCCTGGC	11220
CTCAAGTGAT	CCGCCTGCCT	TGGCCTCCCA	AAGTCCTGGG	ATTACAGGTG	TGAGCCACCA	11280
CACCCAGCTG	СААААСССТА	TTTTTCTTGA	ATGGAGAAAC	ACTTTCCCCT	TATTTATTGA	11340
GTTTGGGAAG	CAAGAAGAGG	GGTAATTCAT	TAAGTGAAAA	TTTCCAAAAT	CCAGAAAACA	11400
TCGATAAAGC	AGCAGCTTAA	TTTTTTAAG	GAAGAATTTT	TTAAACTATC	TTCTTTTGAG	11460
CCTCTTTAGG	AAGACCTCAC	GTCCTTGCCT	TGAATGTTGA	GAGTGGGAAA	TCCAGGGAGG	11520
TTTTGGAATG	CATGCCTTAT	GTCTGCTTTT	TTGTTTGTTA	GAGAAATATA	AATATTTTAT	11580
CTAGGTTTTG	CTGATGGCAG	TCAAGCATGA	ACACAACCCA	CTGTTTGAGA	AGCTGTAATT	11640
TCTGAATTTC	TGCAGAGTGC	ACATCTAGGC	CAGCAAATGG	CAGTAAGAGT	GAGGTGGATT	11700
TAGCTCAGTG	TAAGGATGAA	CTCCAGAACC	ATCGGCTCTG	ACTGAAAGTG	AAGCGGCAGC	11760
CGCGTTGTGG	GAAAGCTGGC	TGGAGTCTCT	CTCATAAGCA	GGCATTCTTT	TTCTCCAGCC	11820
CGTCACTGTG	TTGGTTTGGG	CCCACGGTAA	GCCTCCTGGC	CTCTAGGCTG	TAACCCCCAC	11880
		77 PP 172	TITITE SHEET	(Rule 26)		

CATCCTCCTC TGCCTCGCCT CCAGAGTGAT TGTTCTGAAG CACAACTGGA TGTCATTCCC 11940 CTTCCTGAAC TCCTAGCACC TACAGGGACT CCATCCCTTG TGCCCCACAT ACCTCACACG 12000 TAGACATTCC TAATGAAGAT TTGATTGAAT TATTGTAAAC TCAGTGCCTC CCACTCTTCT 12060 12120 GAGACAGAGT CTTACTGTAT CACCCAGGCT GGAGTTTAGT GGCACCATCT CAGCTCACTG 12180 CAACCTCTAC CTCCCAGACT CAAGCAATCC TCCCACCTCA GCCTCCGAG GAGCTGGGAC 12240 CATAGGCACG TGCCACTATG CCCGGTTAAT TTATTGTAAT TTTTTGTAGAG ATGGGGTTTC 12300 ATCGTGTTGC CCAGGCTAGT CTTGAACTCC TGGACTCAGG CGATTCGCCC GTCTCAGTCT 12360 CCCAAAGTGC TGGGATTATA GGCGTGAGCC ACCATGCCCA GCCGCTAGCA CTCATCTTAA 12420 TCGTATATTT ACTTATCTGG CTTTCCCACC AGACTGCGGG CTCTTCAAGA GTAAATGCCA 12480 TGTTTTCACC TTTATTTCCC CAGTTTGTGG CACATTCTAG GCACTCGCCA TCATGAAATA 12540 AACCTCTGGA GCTGTGATAT TACAAACGTG AAAAGATGAC GAGCACTCAG CAACTTTCAG 12600 TGAGTAAACA AAGGCTTTCA TTCAGCATGT ATTTATTGAC TGCCCTGATC TGGGCTGCTT 12660 CCTGTCTGTG GTTCAAGGAG AGCATAGTCT ACAGAACCAG AGACCTGGCT ACTCTGGAAG 12720 TTAGACTTAA GCCCACCCCG GTCCTTGAAT GGGGAAATAT TTCCCTTCAT TCCTGTGTTT 12780 TAGGGACAGA AAGATGAGTA ATGCAGTGAT ACATGCTGGA AATGTTTATT CCACTACCCG 12840 AAGCTGCCTC TCAACTTAAC AATCCATGAA AGAAACAAGA TGGTATATAA CTTTTTCTAA 12900 TTTGTGATGC CTTTGTTTAT TTGTTTCCGG TTAAAAGAGG AGGTGGCATT GAATTGTTTG 12960 TTTGGTTTGG TTTCTTCTTC AATAAGAAGC ATCTTAATAT AACTAGACTG GACATCTGTC 13020 CCATTTCAA AAATTACAAG TTTCGATCAT TGCTAAATTG TACAGATCCC AATCTGTCTG 13080 CTCTGCATAC ATTTGCATTT ATAAAAGCAG AAGCAGACTA GCAGTCTTTC TAATGCAATC 13140 CCCCAAATGC ATGAAGTATT AGATTGCTTC TCCCTATTGG TTCATGCATT GCTAAAGGCT 13200 TAAAAGGATC ATTGATTTTA ATTATTTAAT GTGTACAGCA GGCTGAGCTT CCTTTCTTTT 13260

TTAAGGGAAG	AACCTTCAGG	GGCATTGCTT	TAGTTTTTTA	ATGTTAAATC	TCATTTTTCT	13320			
TTGAAAATAA	GAAGTTAAAG	CTGTATTCAC	ACAAGCTCTC	AAAGTGCCAG	ATTTTCATTG	13380			
TGTTTTTAAA	CCATCTAGGA	AATGTTTGAT	TCTAATGAAA	CATTACTGCT	GAAAATTGGG	13440			
CTGAAATTGC	TGGGCTGAAA	АТАТТСТТАТ	AACTTCACAT	GATTCCAGTG	TTGTATTATT	13500			
ATTTTTTCTT	TTCCTTTTTT	TGACCCGATA	TAGATGAAGC	GAAGAGACAA	GGGAGCAATC	13560			
CCATGTGTAA	TAAAAAAAGG	CAGCCTGAAT	TGTTGTTGCT	GTTTTTGAAA	TTTAAGCTGG	13620			
TTTTCAATTA	AATTCAGTAA	ATGGTCCAGG	ACTATAAATG	TTGAACATTT	TTTACCGTGT	13680			
GATTTAAAAT	TTAGTTTTAA	TGTTTTTTT	TTGGGTTTTT	TTTTTTTTGA	TGGTTTACAT	13740			
TTTCCCCATG	GAAAGCAGCT	ATGTCATGTC	GGCATGATTC	ATCATGGTAA	CATCTCGGGT	13800			
TATTTTGGTT	TGTGTTATGT	TCAGAAAGCG	GAATGCCAAA	AATAAAGAGT	GGTTTGTGAT	13860			
GTCTAGTGTG	TCTTCCTTTA	ACAAATCAAA	GGCTTTTATT	TAATCCACTT	AATGGGACAC	13920			
TGCAGAAATT	TAAAAAATGG	AAGTCCCATC	CACAGAAGGC	AGGTACTATG	ATGTAAAAAG	13980			
TTTAGGTGGG	GGATTAATAG	AGTGATCATA	TAATTTATGA	GCTAAACCGG	AGGCACTTTT	14040			
TTTTTTGAGA	TCGAGTCTCA	CTGTTGCCTA	GGCTGGAGTG	CAGTGACGTG	ATCACAGCTC	14100			
ACTGCAACCT	CCGCCTCCCG	GGTTCAAGCG	ATTCTCATGC	CTCAGCCTCC	TGAGTAGCTG	14160			
GGACTATAGG	CGCCCACCAC	CATGCCCAGC	TAATTTTTGT	GTTTTTTGTA	GAGATGGGGT	14220			
TTCACCATGT	TGGCCAGGCT	TGTCTCAAAC	TCCTGACCTC	AGGTGATCCG	CCCACCTCGA	14280			
CCTCCTAAAC	TGCTGGGATT	ACAGGCGTAA	GCCACCATGC	CTGGCCCAGA	GACACTTTTG	14340			
AGAGTGAAGA	GGAAGCTGAG	AATAATTCAC	TGATCTACAA	CTGGGACCAT	CCAGGGCAAG	14400			
CCAGATGCCA	TTACCACTAG	CTAGAAAGCT	TGCCAAGGTC	TCATTTACCT	TGGTATATAG	14460			
CAAATTCTTC	TTTGAATTCT	GGAAATTCTG	GTAAGTCATT	GAGGTAGCTC	TGTGCCAAGG	14520			
AGCAATATGG	TAGAATTCTA	ATATTTCAGG	CAGTACAACA	CTTTCCTGCA	TTTGTAGCAG	14580			
, GTAAAGGGAG	GTCAGGGCAG	AAGACAAAAC	CACTGGGACT	CGACAAAGGG	CATAAACGTC	14640			
SUBSTITUTE SHEET (Rule 26)									

TAATGCACCT	GATGTAGCTG	ATGGTAAATT	GTTATCAGCT	AAAGATCTTT	САТААТАААТ	14700
AAACTTATCA	TTTGTAGGAG	GGCACAGAAA	TCGTGGAAAG	CTGGGATTCA	GGTTGCCTGT	14760
GGCTTTAATT	CTGGAATCAG	AAATATTAGT	CAAGGATATC	AGTCTATGAA	GTAAGTTTTC	14820
AATGTTATAT	GCCACAAGAT	GCAGCTGTCC	ТАТТТТСАСТ	TCCAGTAATT	CCTTCTGAAT	· 14880
TAATACACCT	TAAAAATAGC	TGCAGCTTCT	CAAATCTGTG	AGAATCGTAT	GTGCTGCTTG	14940
CTACACTTTC	CTTTTTCCTG	AAGGCCTCTT	TGAGGTCTTT	CAAGAACTCA	ATTCAATTCA	15000
GCAACAATTA	GGGGGTCTAA	GGTATACAGA	CGCTGTGCAA	GATGCTCCTG	AGACACAAAG	15060
AGGAGGTCAA	GCCCCTGCCT	TCAGGCACCT	СТСТАТААТА	TAGGAGGAGA	AAGAGAAGAA	15120
ACACTAATAC	ACATAGGTAG	GTGCCATTAA	AAGGGTGCAT	ACATTAAAGC	CAGGTGGTAG	15180
GTGCAAGAAG	ATTTGTAACG	TGAGAATTTT	CTGCATGTTT	GAAATATCTT	ATAATTTTTA	15240
AAAATTAAAA	TGGGAGATAC	ATATATATGT	ATTTATGTAT	GTATATATGT	ATGTACATAT	15300
ACACACATAT	АТАСАТАААТ	АТАТАСАТАА	ATATGTATAT	ATGTGTATAT	AGACATAAAT	15360
ATGTATATAT	GTGTATATAT	АСАТАААТАТ	GTATATATGT	GTATATAGAC	ATAAATATGT	15420
ATATATGTGT	ATATAGACAT	AAATATGTAT	ATATGTGTAT	ATAGACATAA	ATATGTATAT	15480
GTGTATATAG	ACATAAATAT	GTATATATGT	GTATATAGAC	ATAAATATGT	ATATATGTGT	15540
ATATAGACAT	AAATATGTAT	ATATGTGTAT	ATAGACATAA	ATATGTATAT	ATGTGTATAT	15600
AGACATAAAT	ATGTATATAT	GTGTATATAG	ACATAAATAT	GTATATATGT	GTATATAGAC	15660
ATAAATATGT	ATATATGTGT	ATATAGACAT	AAATATGTAT	ATATGTGTAT	ATAGACATAA	15720
ATATGTATAT	GTGTGTATAT	AGACATAAAT	ATGTATATAT	GTGTGTATAT	AGACATAAAT	15780
ATGTATATAT	GTGTGTATAT	AATAATGTGT	GTACATATAC	ACACATATAT	ACATACATAA	15840
ACATTCTGCA	TTATACCATT	CACTTTGTAA	CCCATCTTCC	CTAAAAACTG	TCTCATAAAG	15900
AGTCTTCTTT	TCCCTGTACC	TATGCAATGG	TAAGTAGCAA	AACACACATT	CTTTTGGGTC	15960
CCCATAACAT	TCCCTGTAGT	TTGCCCTTAA	CAGTCTTTGA	TGTGAAATTT	ACTGTTTCTG	16020

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TCTTAACCTT GCCTGTCTCG CGTACATGGA GTTTTGGCTC CTGGCTCCTA GTCTGCATCT 16080 TCACCCCATC CCTTGCCCAA AGAATCTGGT TATGTGACCA CTGCTCATCT TTTCTGCTGT 16140 CACAACTCCA GTCCAAGCCA CAAACCTCTC TCTCCTGGAC TCCTGCGGGG AGTTCCTTTC 16200 TCTCCCTGCA TGAGTCTATT CTCCGCACAA CTGGCAGAGG TAAGTGAGAC TGCGGAAGAG 16260 GCAAGTTTGC AAGTCCAGAG GAAATGAAGA CTCTGCTTGT GCACATGCTG GGTTTGACGG 16320 GTGCTGGATA TCCGATGGAT GGCCCTTAAG GTGAGCTCAA GGCTTAAGGG AGAGATAGGG 16380 GCTGATGATC TGAGATTCAT CAGTGTGTGG CTGATGTTTA AACCCAGGGG ACAGGATAAG 16440 AAGGTTATTC CAGGGAGAGC GTAGATAAAG AAGCTAAATG GCTTCTGGGT CCTTAGTCAT 16500 TCAAAATCGG ACCTCTGAGG CAGGAGGAAA GCCCAGAAAG AGTAGATTCC TGGGACTCAC 16560 GGGATAAAGA CTTTCAAAAA GTGGGGGCTG GCCAGTGCTG CTGAAGGAAG TAGCAGGACC 16620 GGAACAGAAG GGTAATCGTT GGACCTGGAG AACTTGAATT TGAATTTTAA GGTTGGTAAC 16680 CTTAAAAAAG AGCAATTTTA GATACCTTTT GAAATTATTT GCAAGATTTG TTTGGTATAT 16740 GTGTTATTCC AGGCAAAGGG ACCAGAAAAG TAAAAAATAC TTACTGAACA GTTACTGCAT 16800 GCCTGGCACT GTAACACCCT GTTTAATTCT CACGGCAACC CTATAGAGTA GGTGTCATCA 16860 TCCCCATCTT ACAGATGAGG ATATGAGGTG CAGCTAGATT AAGCAGTTTG CCTCAGGTTA 16920 CACCAACTGG TTAACGTAGA GCTAGGATTT GAACCCGGAT GGGCTGATCC CAGAGCTCAT 16980 GCTTTAAATC GCTAGACTGG TGCTCACAGA AGACTGGGAC CGAAAAAAAT TAATAAAAAA 17040 AATAAGGAGC CCCCTGGGCT AGCAAATTAG GAGTTGTTCA GACAGATGTG AAAAGGAAAG 17100 CAAGGCAGAG GGAAAGTCAC TGTACAGAAG AGAGAGACCC ATGACAGCAG AGACAGTGAG 17160 CTGGTAAAGT GGCTGGCGAT CTAGCCCCTG AAAATACCTC CAGAGAGGCA GGCTCACGCC 17220 TGTAATCCCA GCACTTTGGG AGGCCGAGGT GGGCAGATCA CCTGAGGTCA GGAGTTTGAG 17280 ACCAGCCTGG CCAATGGCGA AATCCCGTCT CTACTAAAAA TACAAAAATT AGCCGAGCAT 17340 GGTGACAGGC ACCTGTAATC CCAGCTGTTC AGTTGGCTGA GTCAGGAGAA TAGCCTGGAT 17400

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CCGGGAAGTG	GAGGTTGTAG	TAAGCCAAGA	TTGCGCCACT	GCATGCCAGC	CTGGGCGACA	17460
GAGCAAGACT	TTTCTTAAAA	CAAACAAACA	AAAAAGAAAA	AAGAAAAGGA	AAGAAGAAAG	17520
AGACAAAGAA	AGAAAGAGAG	AAGGAAAGAA	AGGAAGGAAG	GAAGAGAAGG	AAGGAAGGAA	17580
AGAAAGAAAA	GGAAAGAAAG	AAAAAGAAAG	AAGAAAGAAA	GGAAAGAAAA	GAAAGAAAAA	17640
GAAAGAAAGA	AAATACCTCC	AGAGAGCCAG	GTCTCTTAGG	CCTTCTGAGA	AACTCACATC	17700
CCTTTTGATG	AACACAAATG	CTTCACACTC	TCAATGTTAT	TGGTAATCCA	AGTTATCAAT	17760
АТАССТАААТ	CACTTAGTAC	TGAATCTGGC	ATATAGTAAT	CACCTAATGA	AGAGATAAGA	17820
GTCATGGAGT	ATTCTGAAGC	AATTAGAATC	AATAGACTCA	ATATACACAT	GGCAACAAAG	17880
TTGGATCTTA	AAAACCGACC	TGAGTGAAAA	AGGAAAGGGA	AAGATACATA	ACACGGTACC	17940
ATTATGTAAA	TTGATAATAT	ATGCTTACAC	AATTTGTAAG	AACACATACA	AATAGATACA	18000
TGTATATTAA	ACATACTCGA	ACGGTTACCC	TATGGGGTGG	TGGCTGGAGT	GGGGGTAAGT	18060
CCGTAAGCTG	TAATGGAACC	ТАААСАААТА	CATGAAACGA	GTAGGAATCA	GAAGGAGTAA	18120
СААТААААТ	GTGCCATGAA	CTGAGGAGTG	TAAATTAATC	AACTCACTGC	ATCTGAGGTT	18180
AAAAATAGAA	AGATGATAAT	TGTTATTCTT	ATTACTCCTA	GGTCTTCCAC	TTGCACTCAG	18240
CTTTACAATG	TTGGACTATC	CTTCAGATGG	CACCCTCCTT	GCACTTGCTC	AGGCAGGAGA	18300
GCTTTTTCCT	CCAGCTTTCT	AGGTGATTTA	ATATATCAGG	GAATAAGTAT	AAAAAAAGGC	18360
ACGGTGCTCC	CTGGGTAGCC	TTTCTGGACT	TCAGAGCTAA	ATTGCAAAGT	CAGTTTTACA	18420
CATGTGATTT	CATCTATGAA	ATTAGGGCAA	GGTATAAAAC	TGGCACAGAA	AAAATGTGAT	18480
TTATTATGGT	GTTACTATCC	CTTACAAGCG	GAGTGTCAGC	TGCCTCTTTT	TGTCCACTGA	18540
TTTAAGGCAA	GATGAACTGA	AAGTGGCTAT	GATCACGTCT	TCAAAAGCAC	ACTCTGGCCC	18600
CTCGGCTGCA	GGCGCCCTGC	ACATTCCCCA	GCTGCGTGTC	CGGTGGTGAC	ACAGTGCATA	18660
ATTGTGGCGC	CTTCCTGGTG	CAAACTGTCT	CACTTAGCTC	CGTCTTGCTG	GCACAGCAGA	18720
AAGGAAGAAA	TCGAAAATGT	TTGGATTTCA	AAGGTAACAA	GAAGCTGGAA	AACAACTACT	18780
		TZRITZ	TITTE SHEET	(Rule 26)		

TATAAGGAGA TTTTTTAGCC ATGTGTGACA AAAGAGAGGC CATTTCAGTG TTGAAATTGT 19920 TCAGAGAAGT ATTTGATTAT GTTTTCTCAG ATCTTTTAT TTTTATTTTT TTTGAAACAG 19980 AGTCTCACTT TGTCACCCAG GCTGGAGTAC AGTGGCTGTG GTCTCGGCTC ACTGCAACCT 20040 CTGCCTCCCA GGTTCAAGCG ATTCTCCTGT CAGCTTCCCG AATAGCTGGG ATTACAGGCG 20100	GGCCGAGTCT	GAGAGTTTCA	GCGGAGACTG	GTGCAGCCTT	GTGTTTTTCC	ACTGACAGCT	18840
TCTATTACAG GATTGATAAT ATGTTCCTCC ACCAGATGTT CTGCTTGTAA CAATACTCAC 19020 TTCCTGACAC TACTGCATAT GCAGGAGTGT CACTACCAAG GTAAACACAG AATTGGCTGC 19080 CCAATTCCAA ATCCCTGAAC TGAGTGAGAG AAATCAGAAT TATAATAGGG GATTCAACAG 19140 AGCTGGCTAC GGATGTGCCA GTGGTCAGAT ACTTTGCTCA TCATACGCAG GTGCTGCTGC 19200 TCTAGCAACT GCTCACTGCT TCATTTCCTG CCTTGGTCTT TAAATACTGC TTTTCTCAGC 19260 TCAATTGGCT TTCTTCCCTC TGGCAGTCAC GTTTCTTTGG GTCAAACAGC AAATGATTCT 19320 TTAGAAACAC CTGGTACTCA AAGGAGCTAC AAGACATTGG GCATCCACTT CCACTCTCTT 19380 GGAAAAACAA TTTTATGGAA GCCAAGGTTG CCATAGTGCC TCTTGAGGTT GTTTGCTCAG 19440 CCAAGGCCCA AGCTTTGTGC TTCAAACATG AAATTAGAGA GCTTCAGAAC AAGATCCACA 19500 TTTTCAATGG CCTCACCCAA CTGGATAAAA GAACAATTGC CATATCTCAA TGACCACCTT 19560 TTCTCAGGTG GGATGGTAGA TGCTGGAATG GGTCACAGCA AAACTTTCCA 19620 AAAAAGGCTG GAAGCTCTGA CTGGGGACCC TAAATATGCA AAAGTTAATA GGCTCTTCAT 19680 GCAGAATATG AACCCCGTGT ATGGATATAG CTAAAGAGGT GGCCTTTATG TTTCTATTCC 19740 TTCACAAACC TGGTAGAATA GATATGCTTG TTTCCCTTTA AAAAATGTCA ACAATTGCAT 19800 TTATGATGCT GTGTATAGTA ACTCACAGAT CATGCTCCAT GAAAATGCTT CAGAACCCAA 19860 TATAAAGGAGA TTTTTTAGCC ATGTTGTACA AAAGAGAGGC CATTTCAGTG TTGAAAATTGT 19920 TCAGAGAAGT ATTTGATTAT GTTTTCTCAG ATCTTTTAT TTTTTATTTTT TTTGAAACAG 19980 AGTCTCACTT TGTCACCCAG GCTGGAGTAC AGTGGCTGTG GTCTCGGCTC ACTGCAACCT 20040 CTGCCTCCCA GGTTCAAGCG ATTCTCCTG CAGCTTCCCG AATAGCTGG ATTACAGGCG 20100	GAAAATGAGC	CCAGCTTCAG	TGAAGCTTGT	TTCCTTCCCT	CCTCAAGGTT	ACCCACAATT	18900
TTCCTGACAC TACTGCATAT GCAGGAGTGT CACTACCAAG GTAAACACAG AATTGGCTGC 19080 CCAATTCCAA ATCCCTGAAC TGAGTGAGAG AAATCAGAAT TATAATAGGG GATTCAACAG 19140 AGCTGGCTAC GGATGTGCCA GTGGTCAGAT ACTTTGCTCA TCATACGCAG GTGCTGCTGC 19200 TCTAGCAACT GCTCACTGCT TCATTTCCTG CCTTGGTCTT TAAATACTGC TTTTCTCAGC 19260 TCAAATTGGCT TTCTTCCCTC TGGCAGTCAC GTTTCTTTGG GTCAAACAGC AAATGATTCT 19320 TTAGAATCAC CTGGTACTCA AAGGAGCTAC AAGACATTGG GCATCCACTT CCACTCTCTT 19380 GGAAAAACAA TTTTATGGAA GCCAAGGTTG CCATAGTGCC TCTTGAGGTT GTTTGCTCAG 19500 TTTTCAATGG CCTCACCCAA CTGGATAAAA GAACAATTGC CATATCTCAA TGACCACCTT 19560 TTCTCAGGGT GGATGGTAGA TGCTGGAATG GGTCACAGCA AAAGTTAATA GGCTCTTCAT 19680 GCAGAATATG AACCCCGTGT ATGGATATAG CTAAATATGCA AAAGTTAATA GGCTCTTCAT 19740 TTCACAAACC TGGTAGAATA GATATGCTTG TTTCCCTTTA AAAAATGTCA ACAATTGCAT 19800 TATAGATGCT GTGTATAGTA ACTCACAGAT CATGCTCCAT GAAAATGCTT CAGAACCCAA 19860 TATAGAGGAGA TTTTTTAGCC ATGTGTGACA AAAGAGGGC CATTTCAGTG TTGAAATTGC TCAGAGAGAG TTTTTTAGCC ATGTGTGACA AAAGAGGGC CATTTCAGTG TTGAAACTGC 19920 TCAGAGAGAG TTTTTTAGCC ATGTGTGACA AAAGAGAGGC CATTTCAGTG TTGAAACTGC 19980 AGTCTCACTT TGTCACCCAG GCTGGAGTAC AGTGGCTGTG GTCTCGGCTC ACTGCAACCT 20040 CTGCCTCCCA GGTTCAAGCG ATTCTCCTGT CAGCTTCCCG AATAGCTGG ATTACAGGCG 20100	CTCAGTTCTC	TCAGGAAAGC	CAAAAAATGA	ATTTGAGGGT	TTAGGATTGT	GGTTCTTTTA	18960
CCAATTCCAA ATCCCTGAAC TGAGTGAGAG AAATCAGAAT TATAATAGGG GATTCAACAG 19140 AGCTGGCTAC GGATGTGCCA GTGGTCAGAT ACTTTGCTCA TCATACGCAG GTGCTGCTGC 19200 TCTAGCAACT GCTCACTGCT TCATTTCCTG CCTTGGTCTT TAAATACTGC TTTTCTCAGC 19260 TCAAATTGGCT TTCTTCCCTC TGGCAGTCAC GTTTCTTTGG GTCAAACAGC AAATGATTCT 19320 TTAGAATCAC CTGGTACTCA AAGGAGCTAC AAGACATTGG GCATCCACTT CCACTCTCTT 19380 GGAAAAACAA TTTTATGGAA GCCAAGGTTG CCATAGTGCC TCTTGAGGTT GTTTGCTCAG 19440 CCAAGGCCCA AGCTTTGTGC TTCAAACATG AAATTAGAGA GCTTCAGAAC AAGATCCACA 19500 TTTTCAATGG CCTCACCCAA CTGGATAAAA GAACAATTGC CATACTCAA TGACCACCTT 19660 TTCTCAGGTG GGATGGTAGA TGCTGGAATG GGTCACAGCA TTGCCCAACC AAACTTTGCA 19680 GCAGAATATG AACCCCGTGT ATGGATATAG CTAAAGAGGTT GGCCTTTATG TTTCTATTCC 19740 TTCACAAACC TGGTAGAATA GATATGCTTG TTTCCCTTTA AAAAATGCTA ACAATTGCAT 19860 TATAGAGGCT GTGTATAGTA ACTCACAGAT CATGCTCCAT GAAAATGCTT CAGAACCCAA 19860 TATAGAGAGA TTTTTTAGCC ATGTGTGACA AAAGAGAGGC CATTTCAGTG TTGAAATTGT 19920 TCAGAGAAGT ATTTGATTAT GTTTTCTCAG ATCTTTTAT TTTTATTTTT TTTGAAACAG 19980 AGTCTCACCTT TGTCACCCAG GCTGGAGTAC AGGGCTGTG GTCTCGGCTC ACTGCAACCT 20040 CTGCCTCCCA GGTTCAAGCG ATTCTCCTT CAGCTTCCCA AATACCTGG ATTACAGGCG 20100	TCTATTACAG	GATTGATAAT	ATGTTCCTCC	ACCAGATGTT	CTGCTTGTAA	CAATACTCAC	19020
AGCTGCTAC GGATGTGCCA GTGGTCAGAT ACTTTGCTCA TCATACGCAG GTGCTGCTGC 19200 TCTAGCAACT GCTCACTGCT TCATTTCCTG CCTTGGTCTT TAAATACTGC TTTTCTCAGC 19260 TCAATTGGCT TTCTTCCCTC TGGCAGTCAC GTTTCTTTGG GTCAAACAGC AAATGATTCT 19320 TTAGAATCAC CTGGTACTCA AAGGAGCTAC AAGACATTGG GCATCCACTT CCACTCTCTT 19380 GGAAAAACAA TTTTATGGAA GCCAAGGTTG CCATAGTGCC TCTTGAGGTT GTTTGCTCAG 19440 CCAAGGCCCA AGCTTTGTGC TTCAAACATG AAATTAGAGA GCTTCAGAAC AAGATCCACA 19500 TTTTCAATGG CCTCACCCAA CTGGATAAAA GAACAATTGC CATATCTCAA TGACCACCTT 19560 TTCTCAGGTG GGATGGTAGA TGCTGGAATG GGTCACAGCA TTGCCCAACC AAACTTTGCA 19620 AAAAAGGCTG GAAGCTCTGA CTGGGGACCC TAAATATGCA AAAGTTAATA GGCTCTTCAT 19680 GCAGAATATG AACCCCGTGT ATGGATATAG CTAAAGGGTT GGCCTTTATG TTTCTATTCC 19740 TTCACAAACC TGGTAGAATA GATATGCTTG TTTCCCTTTA AAAAATGTCA ACAATTGCAT 19800 TTATGATGCT GTGTATAGTA ACTCACAGAT CATGCTCCAT GAAAATGCTT CAGAACCCAA 19980 TATAAGGAGA TTTTTTAGCC ATGTGTGACA AAAGGAGGGC CATTTCAGTG TTGAAATTGT 19920 TCAGAGAAGT ATTTGATTAT GTTTTCTCAG ATCTTTTTAT TTTTATTTTT TTTGAAACAG 19980 AGTCTCACTT TGTCACCCAG GCTGGAGTAC AGTGGCTGTG GTCTCGGCTC ACTGCAACCT 20040 CTGCCTCCCA GGTTCAAGCG ATTCTCCTGT CAGCTTCCCG AATAGCTGGG ATTACAGGCG 20100	TTCCTGACAC	TACTGCATAT	GCAGGAGTGT	CACTACCAAG	GTAAACACAG	AATTGGCTGC	19080
TCTAGCAACT GCTCACTGCT TCATTTCCTG CCTTGGTCTT TAAATACTGC TTTTCTCAGC 19260 TCAATTGGCT TTCTTCCCTC TGGCAGTCAC GTTTCTTTGG GTCAAACAGC AAATGATTCT 19320 TTAGAATCAC CTGGTACTCA AAGGAGCTAC AAGACATTGG GCATCCACTT CCACTCTCTT 19380 GGAAAAACAA TTTTATGGAA GCCAAGGTTG CCATAGTGCC TCTTGAGGGTT GTTTGCTCAG 19440 CCAAGGCCCA AGCTTTGTGC TTCAAACATG AAATTAGAGA GCTTCAGAAC AAGATCCACA 19500 TTTTCAATGG CCTCACCCAA CTGGATAAAA GAACAATTGC CATATCTCAA TGACCACCTT 19560 TTCTCAGGTG GGATGGTAGA TGCTGGAATG GGTCACAGCA TTGCCCAACC AAACTTTGCA 19620 AAAAAAGGCTG GAAGCTCTGA CTGGGGACCC TAAATATGCA AAAGTTAATA GGCTCTTCAT 19680 GCAGAATATG AACCCCGTGT ATGGATATAG CTAAAGGGTT GGCCTTTATG TTTCTATTCC 19740 TTCACAAACC TGGTAGAATA GATATGCTTG TTTCCCTTTA AAAAATGCTA ACAATTGCAT 19800 TTATGATGCT GTGTATAGTA ACTCACAGAT CATGCTCCAT GAAAATGCTT CAGAACCCAA 19860 TATAAGGAGA TTTTTTAGCC ATGTGTGACA AAAGAGAGGC CATTTCAGTG TTGAAATTGT 19920 TCAGAGAAGT ATTTGATTAT GTTTTCTCAG ATCTTTTAT TTTTATTTTT TTTTGAAACAG 19980 AGTCTCACTT TGTCACCCAG GCTGGAGTAC AGTGGCTGTG GTCTCGGCTC ACTGCAACCT 20040 CTGCCTCCCA GGTTCAAGCG ATTCTCCTGT CAGCTTCCCG AATAGCTGGG ATTACAGGCG 20100	CCAATTCCAA	ATCCCTGAAC	TGAGTGAGAG	AAATCAGAAT	TATAATAGGG	GATTCAACAG	19140
TCAATTGCT TTCTTCCCTC TGGCAGTCAC GTTTCTTTGG GTCAAACAGC AAATGATTCT 19320 TTAGAATCAC CTGGTACTCA AAGGAGCTAC AAGACATTGG GCATCCACTT CCACTCTCTT 19380 GGAAAAACAA TTTTATGGAA GCCAAGGTTG CCATAGTGCC TCTTGAGGTT GTTTGCTCAG 19440 CCAAGGCCCA AGCTTTGTGC TTCAAACATG AAATTAGAGA GCTTCAGAAC AAGATCCACA 19500 TTTTCAATGG CCTCACCCAA CTGGATAAAA GAACAATTGC CATATCTCAA TGACCACCTT 19560 TTCTCAGGTG GGATGGTAGA TGCTGGAATG GGTCACAGCA TTGCCCAACC AAACTTTGCA 19620 AAAAAGGCTG GAAGCTCTGA CTGGGGACCC TAAATATGCA AAAGTTAATA GGCTCTTCAT 19680 GCAGAATATG AACCCCGTGT ATGGATATAG CTAAAGGGTT GGCCTTTATG TTTCTATTCC 19740 TTCACAAACC TGGTAGAATA GATATGCTTG TTTCCCTTTA AAAAATGCAT ACAATTGCAT 19800 TTATGATGCT GTGTATAGTA ACTCACAGAT CATGCTCCAT GAAAATGCTT CAGAACCCAA 19860 TATAAAGGAGA TTTTTTAGCC ATGTGTGACA AAAGAGAGGC CATTTCAGTG TTGAAATTGT 19920 TCAGAGAAGT ATTTGATTAT GTTTTCTCAG ATCTTTTAT TTTTATTTTT TTTGAAACAG 19980 AGTCTCACTT TGTCACCCAG GCTGGAGTAC AGTGGCTGTG GTCTCGGCTC ACTGCAACCT 20040 CTGCCTCCCCA GGTTCAAGCG ATTCTCCTGT CAGCTTCCCG AATAGCTGG ATTACAGGCG 20100	AGCTGGCTAC	GGATGTGCCA	GTGGTCAGAT	ACTTTGCTCA	TCATACGCAG	GTGCTGCTGC	19200
TTAGAATCAC CTGGTACTCA AAGGAGCTAC AAGACATTGG GCATCCACTT CCACTCTCTT 19380 GGAAAAACAA TTTTATGGAA GCCAAGGTTG CCATAGTGCC TCTTGAGGTT GTTTGCTCAG 19440 CCAAGGCCCA AGCTTTGTGC TTCAAACATG AAATTAGAGA GCTTCAGAAC AAGATCCACA 19500 TTTTCAATGG CCTCACCCAA CTGGATAAAA GAACAATTGC CATATCTCAA TGACCACCTT 19560 TTCTCAGGTG GGATGGTAGA TGCTGGAATG GGTCACAGCA TTGCCCAACC AAACTTTGCA 19620 AAAAAAGGCTG GAAGCTCTGA CTGGGGACCC TAAATATGCA AAAGTTAATA GGCTCTTCAT 19680 GCAGAATATG AACCCCGTGT ATGGATATAG CTAAAGGGTT GGCCTTTATG TTTCTATTCC 19740 TTCACAAACC TGGTAGAATA GATATGCTTG TTTCCCTTTA AAAAATGTCA ACAATTGCAT 19800 TTATGATGCT GTGTATAGTA ACTCACAGAT CATGCTCCAT GAAAATGCTT CAGAACCCAA 19860 TATAAAGGAGA TTTTTTAGCC ATGTGTGACA AAAGAGAGGC CATTTCAGTG TTGAAATTGT 19920 TCAGAGAAGT ATTTGATTAT GTTTTCTCAG ATCTTTTAT TTTTATTTTT TTTGAAACAG 19980 AGTCTCACTT TGTCACCCAG GCTGGAGTAC AGTGGCTGTG GTCTCGGCTC ACTGCAACCT 20040 CTGCCTCCCA GGTTCAAGCG ATTCTCCTGT CAGCTTCCCG AATAGCTGG ATTACAGGCG 20100	TCTAGCAACT	GCTCACTGCT	TCATTTCCTG	CCTTGGTCTT	TAAATACTGC	TTTTCTCAGC	19260
GGAAAAACAA TTTTATGGAA GCCAAGGTTG CCATAGTGCC TCTTGAGGTT GTTTGCTCAG 19440 CCAAGGCCCA AGCTTTGTGC TTCAAACATG AAATTAGAGA GCTTCAGAAC AAGATCCACA 19500 TTTTCAATGG CCTCACCCAA CTGGATAAAA GAACAATTGC CATATCTCAA TGACCACCTT 19560 TTCTCAGGTG GGATGGTAGA TGCTGGAATG GGTCACAGCA TTGCCCAACC AAACTTTGCA 19620 AAAAAAGGCTG GAAGCTCTGA CTGGGGACCC TAAATATGCA AAAGTTAATA GGCTCTTCAT 19680 GCAGAATATG AACCCCGTGT ATGGATATAG CTAAAGGGTT GGCCTTTATG TTTCTATTCC 19740 TTCACAAACC TGGTAGAATA GATATGCTTG TTTCCCTTTA AAAAATGTCA ACAATTGCAT 19800 TTATGATGCT GTGTATAGTA ACTCACAGAT CATGCTCCAT GAAAATGCTT CAGAACCCAA 19860 TATAAAGGAGA TTTTTTAGCC ATGTGTGACA AAAGAGAGGC CATTTCAGTG TTGAAATTGT 19920 TCAGAGAAGT ATTTGATTAT GTTTTCTCAG ATCTTTTAT TTTTATTTTT TTTGAAACAG 19980 AGTCTCACTT TGTCACCCAG GCTGGAGTAC AGTGGCTGTG GTCTCGGCTC ACTGCAACCT 20040 CTGCCTCCCA GGTTCAAGCG ATTCTCCTGT CAGCTTCCCG AATAGCTGGG ATTACAGGCG 20100	TCAATTGGCT	TTCTTCCCTC	TGGCAGTCAC	GTTTCTTTGG	GTCAAACAGC	AAATGATTCT	19320
CCAAGGCCCA AGCTTTGTGC TTCAAACATG AAATTAGAGA GCTTCAGAAC AAGATCCACA 19500 TTTTCAATGG CCTCACCCAA CTGGATAAAA GAACAATTGC CATATCTCAA TGACCACCTT 19560 TTCTCAGGTG GGATGGTAGA TGCTGGAATG GGTCACAGCA TTGCCCAACC AAACTTTGCA 19620 AAAAAGGCTG GAAGCTCTGA CTGGGGACCC TAAATATGCA AAAGTTAATA GGCTCTTCAT 19680 GCAGAATATG AACCCCGTGT ATGGATATAG CTAAAGGGTT GGCCTTTATG TTTCTATTCC 19740 TTCACAAACC TGGTAGAATA GATATGCTTG TTTCCCTTTA AAAAATGTCA ACAATTGCAT 19800 TTATGATGCT GTGTATAGTA ACTCACAGAT CATGCTCCAT GAAAATGCTT CAGAACCCAA 19860 TATAAGGAGA TTTTTTAGCC ATGTGTGACA AAAGAGAGGC CATTTCAGTG TTGAAATTGT 19920 TCAGAGAAGT ATTTGATTAT GTTTTCTCAG ATCTTTTAT TTTTATTTTT TTTGAAACAG 19980 AGTCTCACTT TGTCACCCAG GCTGGAGTAC AGTGGCTGTG GTCTCGGCTC ACTGCAACCT 20040 CTGCCTCCCA GGTTCAAGCG ATTCTCCTGT CAGCTTCCCG AATAGCTGGG ATTACAGGCG 20100	TTAGAATCAC	CTGGTACTCA	AAGGAGCTAC	AAGACATTGG	GCATCCACTT	CCACTCTCTT	19380
TTTTCAATGG CCTCACCCAA CTGGATAAAA GAACAATTGC CATATCTCAA TGACCACCTT 19560 TTCTCAGGTG GGATGGTAGA TGCTGGAATG GGTCACAGCA TTGCCCAACC AAACTTTGCA 19620 AAAAAAGGCTG GAAGCTCTGA CTGGGGACCC TAAATATGCA AAAGTTAATA GGCTCTTCAT 19680 GCAGAATATG AACCCCGTGT ATGGATATAG CTAAAGGGTT GGCCTTTATG TTTCTATTCC 19740 TTCACAAACC TGGTAGAATA GATATGCTTG TTTCCCTTTA AAAAATGTCA ACAATTGCAT 19800 TTATGATGCT GTGTATAGTA ACTCACAGAT CATGCTCCAT GAAAATGCTT CAGAACCCAA 19860 TATAAAGGAGA TTTTTTAGCC ATGTGTGACA AAAGAGAGGC CATTTCAGTG TTGAAATTGT 19920 TCAGAAGAAGT ATTTGATTAT GTTTTCTCAG ATCTTTTAT TTTTATTTTT TTTTGAAACAG 19980 AGTCTCACTT TGTCACCCAG GCTGGAGTAC AGTGGCTGTG GTCTCGGCTC ACTGCAACCT 20040 CTGCCTCCCA GGTTCAAGCG ATTCTCCTGT CAGCTTCCCG AATAGCTGGG ATTACAGGCG 20100	GGAAAAACAA	TTTTATGGAA	GCCAAGGTTG	CCATAGTGCC	TCTTGAGGTT	GTTTGCTCAG	19440
TTCTCAGGTG GGATGGTAGA TGCTGGAATG GGTCACAGCA TTGCCCAACC AAACTTTGCA 19620 AAAAAGGCTG GAAGCTCTGA CTGGGGACCC TAAATATGCA AAAGTTAATA GGCTCTTCAT 19680 GCAGAATATG AACCCCGTGT ATGGATATAG CTAAAGGGTT GGCCTTTATG TTTCTATTCC 19740 TTCACAAACC TGGTAGAATA GATATGCTTG TTTCCCTTTA AAAAATGTCA ACAATTGCAT 19800 TTATGATGCT GTGTATAGTA ACTCACAGAT CATGCTCCAT GAAAATGCTT CAGAACCCAA 19860 TATAAAGGAGA TTTTTTAGCC ATGTGTGACA AAAGAGAGGC CATTTCAGTG TTGAAATTGT 19920 TCAGAGAAAGT ATTTGATTAT GTTTTCTCAG ATCTTTTAT TTTTATTTTT TTTGAAACAG 19980 AGTCTCACTT TGTCACCCAG GCTGGAGTAC AGTGGCTGTG GTCTCGGCTC ACTGCAACCT 20040 CTGCCTCCCA GGTTCAAGCG ATTCTCCTGT CAGCTTCCCG AATAGCTGGG ATTACAGGCG 20100	CCAAGGCCCA	AGCTTTGTGC	TTCAAACATG	AAATTAGAGA	GCTTCAGAAC	AAGATCCACA	19500
AAAAAGGCTG GAAGCTCTGA CTGGGGACCC TAAATATGCA AAAGTTAATA GGCTCTTCAT 19680 GCAGAATATG AACCCCGTGT ATGGATATAG CTAAAGGGTT GGCCTTTATG TTTCTATTCC 19740 TTCACAAACC TGGTAGAATA GATATGCTTG TTTCCCTTTA AAAAATGTCA ACAATTGCAT 19800 TTATGATGCT GTGTATAGTA ACTCACAGAT CATGCTCCAT GAAAATGCTT CAGAACCCAA 19860 TATAAAGGAGA TTTTTTAGCC ATGTGTGACA AAAGAGAGGC CATTTCAGTG TTGAAATTGT 19920 TCAGAGAAGT ATTTGATTAT GTTTTCTCAG ATCTTTTAT TTTTATTTTT TTTGAAACAG 19980 AGTCTCACTT TGTCACCCAG GCTGGAGTAC AGTGGCTGTG GTCTCGGCTC ACTGCAACCT 20040 CTGCCTCCCA GGTTCAAGCG ATTCTCCTGT CAGCTTCCCG AATAGCTGGG ATTACAGGCG 20100	TTTTCAATGG	CCTCACCCAA	CTGGATAAAA	GAACAATTGC	CATATCTCAA	TGACCACCTT	19560
GCAGAATATG AACCCCGTGT ATGGATATAG CTAAAGGGTT GGCCTTTATG TTTCTATTCC 19740 TTCACAAACC TGGTAGAATA GATATGCTTG TTTCCCTTTA AAAAATGTCA ACAATTGCAT 19800 TTATGATGCT GTGTATAGTA ACTCACAGAT CATGCTCCAT GAAAATGCTT CAGAACCCAA 19860 TATAAAGGAGA TTTTTTAGCC ATGTGTGACA AAAGAGAGGC CATTTCAGTG TTGAAATTGT 19920 TCAGAGAAGT ATTTGATTAT GTTTTCTCAG ATCTTTTAT TTTTATTTTT TTTGAAACAG 19980 AGTCTCACTT TGTCACCCAG GCTGGAGTAC AGTGGCTGTG GTCTCGGCTC ACTGCAACCT 20040 CTGCCTCCCA GGTTCAAGCG ATTCTCCTGT CAGCTTCCCG AATAGCTGGG ATTACAGGCG 20100	TTCTCAGGTG	GGATGGTAGA	TGCTGGAATG	GGTCACAGCA	TTGCCCAACC	AAACTTTGCA	19620
TTCACAAACC TGGTAGAATA GATATGCTTG TTTCCCTTTA AAAAATGTCA ACAATTGCAT 19800 TTATGATGCT GTGTATAGTA ACTCACAGAT CATGCTCCAT GAAAATGCTT CAGAACCCAA 19860 TATAAAGGAGA TTTTTTAGCC ATGTGTGACA AAAGAGAGGC CATTTCAGTG TTGAAATTGT 19920 TCAGAGAAGT ATTTGATTAT GTTTTCTCAG ATCTTTTAT TTTTATTTTT TTTGAAACAG 19980 AGTCTCACTT TGTCACCCAG GCTGGAGTAC AGTGGCTGTG GTCTCGGCTC ACTGCAACCT 20040 CTGCCTCCCA GGTTCAAGCG ATTCTCCTGT CAGCTTCCCG AATAGCTGGG ATTACAGGCG 20100	AAAAAGGCTG	GAAGCTCTGA	CTGGGGACCC	TAAATATGCA	AAAGTTAATA	GGCTCTTCAT	19680
TTATGATGCT GTGTATAGTA ACTCACAGAT CATGCTCCAT GAAAATGCTT CAGAACCCAA 19860 TATAAGGAGA TTTTTTAGCC ATGTGTGACA AAAGAGAGGC CATTTCAGTG TTGAAATTGT 19920 TCAGAGAAGT ATTTGATTAT GTTTTCTCAG ATCTTTTAT TTTTATTTTT TTTGAAACAG 19980 AGTCTCACTT TGTCACCCAG GCTGGAGTAC AGTGGCTGTG GTCTCGGCTC ACTGCAACCT 20040 CTGCCTCCCA GGTTCAAGCG ATTCTCCTGT CAGCTTCCCG AATAGCTGGG ATTACAGGCG 20100	GCAGAATATG	AACCCCGTGT	ATGGATATAG	CTAAAGGGTT	GGCCTTTATG	TTTCTATTCC	19740
TATAAGGAGA TTTTTTAGCC ATGTGTGACA AAAGAGAGGC CATTTCAGTG TTGAAATTGT 19920 TCAGAGAAGT ATTTGATTAT GTTTTCTCAG ATCTTTTAT TTTTATTTTT TTTGAAACAG 19980 AGTCTCACTT TGTCACCCAG GCTGGAGTAC AGTGGCTGTG GTCTCGGCTC ACTGCAACCT 20040 CTGCCTCCCA GGTTCAAGCG ATTCTCCTGT CAGCTTCCCG AATAGCTGGG ATTACAGGCG 20100	TTCACAAACC	TGGTAGAATA	GATATGCTTG	TTTCCCTTTA	AAAAATGTCA	ACAATTGCAT	19800
TCAGAGAAGT ATTTGATTAT GTTTTCTCAG ATCTTTTTAT TTTTATTTTT TTTGAAACAG 19980 AGTCTCACTT TGTCACCCAG GCTGGAGTAC AGTGGCTGTG GTCTCGGCTC ACTGCAACCT 20040 CTGCCTCCCA GGTTCAAGCG ATTCTCCTGT CAGCTTCCCG AATAGCTGGG ATTACAGGCG 20100	TTATGATGCT	GTGTATAGTA	ACTCACAGAT	CATGCTCCAT	GAAAATGCTT	CAGAACCCAA	19860
AGTCTCACTT TGTCACCCAG GCTGGAGTAC AGTGGCTGTG GTCTCGGCTC ACTGCAACCT 20040 CTGCCTCCCA GGTTCAAGCG ATTCTCCTGT CAGCTTCCCG AATAGCTGGG ATTACAGGCG 20100	TATAAGGAGA	TTTTTTAGCC	ATGTGTGACA	AAAGAGAGGC	CATTTCAGTG	TTGAAATTGT	19920
CTGCCTCCCA GGTTCAAGCG ATTCTCCTGT CAGCTTCCCG AATAGCTGGG ATTACAGGCG 20100	TCAGAGAAGT	ATTTGATTAT	GTTTTCTCAG	ATCTTTTAT	TTTTATTTT	TTTGAAACAG	19980
	AGTCTCACTT	TGTCACCCAG	GCTGGAGTAC	AGTGGCTGTG	GTCTCGGCTC	ACTGCAACCT	20040
CATGCACCAC CATGCCTAAT TTTTGTATTT TTAGTAGAGA CAGAGTTTCG CCATGTTGAC 20160	CTGCCTCCCA	GGTTCAAGCG	ATTCTCCTGT	CAGCTTCCCG	AATAGCTGGG	ATTACAGGCG	20100
	CATGCACCAC	CATGCCTAAT	TTTTGTATTT	TTAGTAGAGA	CAGAGTTTCG	CCATGTTGAC	20160

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CAGGCTTGCC	TTGAACTCCT	GACTTCAGGT	GATCCACCCA	CCTCAGCCTC	CCAAAGCACT	20220
GGGATTACAG	GCATGAGCCA	CCGTGCCCAG	CCTGTTTTCT	CAGATCCTGT	ATTTTGTTTC	20280
TGAAGCCTTC	ATTTCTATCT	TCTTATTCAT	TTTGGAAGTA	GTACACCTAA	GTAAGGTTTT	20340
ТААСААТСАА	ATATCTTTGG	AAAATTCCCT	GGTTCCTTTC	TTATTCCTAC	AAAAATATGT	20400
TCAGTATAGC	TGATGTTATG	TTTCTTTCAA	ATTATTCATT	TCTCTATCTC	AGAATTTATC	20460
TCATGCCTAA	TTGTTATTGA	ATAGTCTTCA	CTTCTTGTCA	TCCAGTTTCT	GGTCTCTTAT	20520
TTCACTCTAA	GTCTAATTGG	CTATTAGAAT	AAAGAGCTTG	TAACAGATTC	TTTCTCCAAT	20580
ATGTCTTATC	TTTTGACTGC	ATGCCAGTGA	CAAACTGTTA	ACTGTTTTGA	TTCTTCATAA	20640
CATTCCACAG	AACATGCTGA	СТССТСТСТТ	CCTGAAAGCA	ATGCCCAAGC	ACAGCATTGT	20700
TAGATAGTAT	GTACGCAACA	GGGACATGGG	TGCATAGCAA	AAACTAGAAG	GAAGGAGGAC	20760
CTTCCTTAGC	AATGGGTGAT	ATGGTCCCTG	GACTTAGACT	CCAAAGGGTC	GTGAGGTGAA	20820
ACACACATCG	TCCATACCCA	GGAAGCACAC	AGGTGGGATG	GAAGAGCTGT	GCCTAATGAA	20880
ACTTCATCCA	CGTGGAGGTG	GAGGAGGCTG	CAGCTGCAAG	AACTCAGAGC	TGCCTTACCC	20940
AGACCAGGGA	CCAGGGAGGG	CTTTCTGGAG	GAAACAGCCT	CTGAACTGCC	AGCTGATAGA	21000
GGAGCTCTAC	CTCAACTCTT	CTGGTTCCCC	AGGGCTGCTT	TTCCACGTCC	ATTTATTGGC	21060
ACTGAAGTTT	GAATACCTTC	AGGGGCCCGA	AAGCCTGCCA	GGTCCTCTTC	TCTGCAGAGC	21120
AATCACACCA	ACCTGCAAAG	GGCTAGGAAA	GGGCTGTCAT	CATCTCCTAC	TCAGAAACTG	21180
GTTCACTGGA	AGGACTCAGG	GGCCACTGAA	TACATCCTGG	CAGCTTTCAC	AAGAAGGGCT	21240
TCTGACTCAA	GGATGTTTCC	ATCTTTGCCA	GGTCGCCTTT	TCTCCTTCTC	TTAGAGTTTG	21300
GAGGACGCAA	ATGTGCTGAG	AAGTCAACCT	TTCCTGCAAG	GTGAGACACA	AGGGCCTTTC	21360
CCAGCAGAAA	GAAGAGAGCA	AATGGAAGGT	CCTTCTTCCT	CCAGTAGAGG	ATGGACTCTG	21420
TCTGGCAGCC	ACCCAACAGG	AAAAGCACAA	TGCATGCCTG	CCTGCTTCCC	тесетесете	21480
CGTTTCTCCC	TCCCTCCCTC	CTTCCTCCCT	TCCATTCTCT	TCCCTTCCCC	TCCCTTCCCT	21540

TCCCCTCCCT	TCCCTTCCCC	TCCCCTCCCC	TTCCCTTCTC	CCTCTCCTTC	CCTTCCTCTT	21600
CCCTTCCTTC	CTCTTCCCTT	CCTTTCCCCT	CCCCTTCCTT	TCCCTTCCTC	CCTCCCTTCC	21660
TCCCTTCTTT	CCTTCCCTTC	TTTCCTTCCT	CATTTCCTCC	CTTCCTTCCT	TCCTTCCTTC	21720
CTTTCTTCCT	ACTTTCCTAC	CTTTAGGGCT	CTGTGTCTTT	GGAGTCCATT	CTGATTATGC	21780
TGTAATGTCT	GCCCCTTCCT	CTTCTCTGTC	AAAAAATGAA	AGACATGGAA	GCCACTTGCC	21840
TTTTACTGAA	ТТААААТТА	GTAAAAGAGC	TAAAAATTAA	TGGTTAAAAA	TGTACGCATA	21900
AATTATGCAG	TATACTAACC	AATGAAAAGA	TACACTTCTC	TTAATTAAAA	GCTGACAGGG	21960
AGGGAAACAA	GAAAAGAGAA	ACACAAAACA	ATAATCTAAA	TGACCTATTA	GTTGGAAGAA	22020
CAACATCAGA	GAAAATAGAT	ACTGTGTATA	GTCATGTGTA	TGTCTATGGA	ATAACATTTG	22080
TAGAGAAATC	TGGACTGATC	CTTTCTGAGT	AAAGAGAGCT	GTGGGTACAA	TTAAGGGGAG	22140
ATTGAAAGGA	ATCCAAAAGC	ATAGCAGATG	CTGTGCCTCA	CTGGAATGGT	TGCCGATCTC	22200
СТССАААСТА	TGAAGTGTTT	GAGGCTCAAC	TTTAATATAA	TTAAGATACA	AAGACAGAAT	22260
GAGAGAAAGA	GAGAAGGGAG	CTCACTGGAA	GAACACTCAA	GATTCCTTAC	TACTCATTCT	22320
СТААААТТАС	AATTGTTCTA	GATGGAAAAG	AAAAAAAGCT	TCTCTGTTAA	AAAAGGAGCT	22380
TGTGCTATAG	GAGGTTTAAA	ATATACTTCT	GACCCATCTC	CAACATTCTA	AATCCTTCCC	22440
AGAAAAGTAT	GCCAATCCCA	AGAAATATTC	AATCAAATTG	CTGGAAAGAA	AAATACAAAA	22500
TATTAAAATG	TATTAGGAAG	CGACAGTAAT	TAAATCAGAA	CTGGAGCAGG	AATAGACCAG	22560
CAGATCAATG	AGACAGACAT	CAAGTCCCGG	AATGTGGACT	TGCAAATGCA	TTAAGTAATA	22620
TGATATGCAA	TAAAGGTGGC	ACAGTGAACC	AATGGGAAAA	AAATTAATCT	ТАТААТААТТ	22680
GATATTGCAA	TAATTGTCTA	GTAATTGGGG	GAAGAAATAA	GCTTATTCCT	TATCTCATTT	22740
CTTTTTTCT	TTTTGAGACA	GAGTCTCACT	CTGGTAGCCC	AGGCTGGAGT	GCAGCGATGC	22800
GATCTCTGCC	CACTGCAACC	TTGCTCTCCC	GGGCTCAGGC	GATTCTCCCA	CCTCAGCCTC	22860
CCGAGCAGCT	GAACTACAGG	CGTGTGCCAC	CACTCCCGGC	AATTTTTTT	TCCATTTTTA	22920

GTAGAAATGG	GGTTTCACCA	TGTTGCCTGG	GCTGGTCTTG	AACTCCTGGG	CTCAGGCAAT	22980
CCACCCGCCT	TGGCCTCCCA	AAGTGCTAGC	ATTACAGGCA	TGAGCCACCG	CGCCTGGCAG	23040
CTCATTTTT	AGACTAAATA	AATTGGAGAT	GGCTAAAAGA	TTTTTATGTA	GGCCAACTAT	23100
GTTTTTAAAA	AGTTTTTTT	TTTAAGGATA	TCTGCTGGAA	CCAATCATGC	CACCAACCAA	23160
AGATGCAAGA	СТАТААААСА	TACCCAGTTT	TTCAAAGCAT	ТТАААААТТА	TTCTAAAAAT	23220
ATTTTTTCTC	CAGAAATTTT	GCATTGATTC	CCTGAAGAAG	CATTAATATG	GGACCTGACT	23280
TATAAAATGA	TGAACTCAAT	CTCCCCACTC	AAGGTAGGAG	TCTCTCAGAT	ТТАААААТА	23340
AGCATCCTAG	TCCTCTTGTC	CCTGTAAAAG	TTAACCCTTA	CACCTGAAAC	ACCAGGAGAC	23400
TGGCGGTTGT	TTGCATAGGG	GTTACAATTA	AAGTTGAGCT	ACCTCTGACA	ТСТАТТААСА	23460
CCAAAATTAG	TAAACTATGC	ATGTATGGAG	ACTTTTATGA	TTGAACTTGT	TTATTGAGTC	23520
AAGAGATATA	GTTTACAATG	AAAATTTGGG	GCATATCAAA	ATGACCTTGG	CTTAGCTTAG	23580
CATTTGCTGA	TGTTAACTAT	TTTCTTCATT	GGGCTGATTT	TAGTTGCTTA	GGAAAAATAC	23640
AAACACACAC	ACTTTAAAAT	TATATTAAAA	TCCCGTCCTA	AACCTCAGAG	TCCAGAACCG	23700
CATCCTAACA	CTGGTCATGC	ATAATATGTT	TAAATTTTTG	TGCTTTAAAA	ACTACAAATA	23760
AGGAATGTAT	TAATAGTTCC	ACAATCAATG	GTCAGTTAGC	CGAGGGAAGA	TTAGCATAGT	23820
TAAAGACTTA	AAATGGCTTA	ACAACATATA	TCAAAAGGAC	AAAATAAGGG	GAACAGAGTC	23880
TAGAAATGAG	GAAACTGGGA	CACAGGCAAA	АААААААТ	GAGAACTGGG	ACATGAATAA	23940
CGCAAGGGAT	AAGACTAATA	CACAAAACAC	CCCAAATAAA	TAGCCAGCAT	TTGCTGAGCT	24000
CTTACTGTGA	GCCTGTTCTA	AGCACTTTAC	ATATATTAAC	TCATTTCATC	CTCAAGGAAC	24060
CATCTGAGGC	AGGCACTGTT	ATCATCTCCA	TTTTACAGAT	AAGGAATAGA	CCCAGAGAGG	24120
CTGAGCAACT	GGGCCTATTC	CACAGCTACT	ATGGTGGAGA	TGAGATTTAA	ATCTAATCAT	24180
TGGCTCCAGA	GCCCATGCAC	CCAATGGCTG	CACTAAGTGA	ATGCATGCGC	TATCAACGTT	24240
GCCAAAAGTG	GGCCACAGCT	CGGATCTGCG	TTTTCCAGTA	GCCAAAGCAG	AGAGTGTGAT	24300

CAGACCTCAC	TTTAATAAGC	AAGTCTCAAG	CCAGAGAGAG	GTGGTATCAG	GCAGCAAACA	24360
GGCTGCTAGT	CGAAATCCCA	CTTCTTCTCT	GAGTGGTCCA	TACAGTTTTA	CTCTACTTGC	24420
TTACAGAATG	AAAATAGCTG	GAGTTCAGGT	GCGCTTTCAA	TGCCCTGTTG	TCAGGATTGG	24480
GCTTTTCAAG	TTTATTTTT	GTTGTTGTTT	TTAATAGACT	GTACTTTTTA	GAAAATTTTT	24540
·AGATTTACAG	AAAGATTGAG	AGGATAGTAC	AGAGAGTTCC	CGTATACCTC	ACACCCAGTT	24600
TCTGCAATTA	TTAACCTCTT	ACATTCATGC	GGTACATTTG	ТТАСААТТАА	TGAGCCAGGG	24660
CCGGCCGGGC	ACAGTGGTTC	AGGCCCCTAA	TCCCAGCACT	TTGGGAGGCA	GAGGCAAGCG	24720
AATCACTTGA	GGTCAGGAGT	TCGAGACTAG	CCTGACCAAC	ATGGTAAACC	CTTTCTGTAC	24780
тааааатаса	AAAAATTAGC	CAGGCATGGT	GCTGGTTGCC	TGTATTCCCA	GATACTCAGG	24840
AGGCTGAGGC	ACAAGAATTG	CTTGAACCAG	GGAGGCGGAG	GTTGCAGTAA	GCCGAGATCG	24900
TGCCACTGCA	CTCCAGCCTG	GGCAACAGAG	CGAGACTCCA	тстсаааааа	АААААААА	24960
AAAAGAAGGA	AGGAAGGAAG	GAAAATTAAT	GAGCCAATAT	TGAGACATTA	TTATTACTAA	25020
AGTCCATGCT	TTATGCAGAT	TTTCTTAGTT	TTTACCTGCT	GTCATTTTTC	AGTTCCAGGA	25080
ATGCATTCAG	GATGCCATAC	CACATTTAGT	TCTCATATCT	GCTTAGGCTC	CTCTTGGCTA	25140
GACTGAGTTT	TAATCTACTT	TCTGCAGAGC	CTGAGAACTT	TAGCATAATT	TCCTTGAAAT	25200
TACAGCTCAA	TATTTTCAAG	CACTTATACA	AACAGCCTAA	TGTTACGTTG	GCCCATAACA	25260
GTGTTTCAAG	GTAATAAACT	TCTTTGTTTT	CTGTGCCGAT	TGAAAGAACT	GCTGCTTAGC	25320
CTCCTGCCAG	ATGATGAACT	GGGTACACAC	GAGCATTTTT	CCAGGTAAAG	CATATTTCGT	25380
GCGACTTCTT	AAGCTGCAGC	CTTATATGCA	ATAATTGTCC	ATTTACAAGA	CTTATGTTCG	25440
AATTTCAGGC	ACTCTGTTTT	CACTAACCAT	ATCTTCAACT	TTGATAAGTA	CTGCTTTAAT	25500
CACTCAGAAA	ATTTAACTTG	ACTAATTTTT	TTTCACCATC	AGTTTTTTT	CTGTTGACTC	25560
TTTCTCCTTT	TTCTGTTTGC	CCAGAAACAT	GCTCAGGATT	CTCTCAGGCT	TTAAAAAATG	25620
AAAAAATGTT	TCCTGCAATC	TAGTTACTCC	TTGATTCTCT	TGTTCTGTTT	ATCGCTGGAA	25680
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TTCTTGAAAG CTTGGTGTAT TAGTCTTTTT TCATGCTGCT GATAAAGATA TACCTGAGAC 25740 TGGATAATTT ATAAAGAAAA AGAGGTTTAA TGGACTCACA GTTCCACGTG GCTGAGGAAG 25800 CCTCACAATC ATGGTGGAAG GCAAAAGGCA TGTCTTACAT GGCAGCAGAC AAGAGAGAAT 25860 GAGAACCAAG GGATTTCCCC TTATAAAACC ATCAGATCTT GTGAGACTTA TTCACTACCA 25920 CAAGAACAAT ATGGGGTAAA CCGCCCCAT GATTCAATTA TCTCCCACCG GGGCCCTCCC 25980 ACAACACGTG GGAATTATGG GAGCTACAAT TCAAGATGAC ATTTGGGTGG GGACATGGCC 26040 AAACCATATC ACCTGGCCTA TAGCATTATT TCCATTTCTT CCCCATCCTT TTATTCCTCA 26100 AACCGGTACA ACCAGACCTC TTTTTTTTT TTTCTACCTG AAACTGCTCT TTTGAGGGTA 26160 GCTGATAAGT CCAAAATACT GTCACCTTTT CTCAATTCCG TTCCTTCA TGCCTTTGGA 26220 GCAATTGACT GTGTTGGTTG CCCCCTCCTT TAAAGTGTCT CTCACTTGGT TTTTATGACT 26280 26340 CCCTCCCATC CCCTAAATGT CCTTGTTTCC CAGAATCTGC CTCACCTCTT TGACTTCTCT 26400 ATGCCCTGTC ATTCACTCAT GGGTCTTTAT TACATTATTG CATCTGTGTC AATAACTCTG 26460 GTCTTTCTCT TAAGTTCCAG TCTCCCATTT TCAAATGTCC CCAGACATTT CCAATTGAGT 26520 ATCTCTCCAA TGTATTTAAC CTGCTAAATA TCTAACACAT AATCTTTCCC ATCAAATCGT 26580 TTCCTCTTAA GCTTTTCTTA TTTCCTATTA GTACTCCTGC ACTTCTCCCA GGAGCCCAGA 26640 CTTAAAACCT TGAATTTCTC ACCATAACCT CTCTTTTGTC TCCCATAATC AATTAGTAGC 26700 AAGTGTTATC AATGATTACT TGACAATATC TTTTTCTATT TCCCTCCCTG CTATGATCAT 26760 TCATCTAGCA AGAAGAGTTG GCCCTTTGTA TCTGTGGTTT CTGCATCCCT GGATTCAACC 26820 AACTGTAGAT GGAAAATATT TGAAGAAAAA AGCGTCTATA CTGAGTATGA AAAAATTTTA 26880 TTTCTTGTCA TTATTCCCTA AACAATACAG TATAACAACT ACAGCATTTA CACTGTAGCG 26940 TATAGATCTT ATAATCTAGA AATGATTTCA AGTACACCAT TATATATAAG GGACTTGAGC 27000 ATCTGTGAAG TTTGGTATTT GTGGGGCATA CTGGGACCAA TTCCCCCATG GATACAGAGG 27060

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GACAACTATA	TTTACTCAGT	GCTTACTAAA	TACCAGTTGG	CCAATGTGTT	TTTCTTTTTC	27120
TGTTTTCCTG	TCTTTAGTTT	GCCCCTTGCC	AATTAATTCA	ATAGTGCTGC	CAATGCCAGG	27180
TGTACCTTCA	GAATATTCTA	TTCTAATTTT	GTCATCTCCA	AGCTTAAAAA	TATTTAATGG	27240
GCCAGGCGCA	GTGGCTCACA	CTTGTAATCC	CAGCATTTTG	GGAGGCCAAG	GGGGGGTGTA	27300
TCACTTGAGG	TCAGGAGTTC	CAGACCAGCC	TGGCCAACAT	GGCGAAACCC	TGTCTCTACA	27360
AAAAAGTATA	AAAGTTAACC	AGGTGCTGGA	GCATTTGCCT	GTGGTCCCAG	CTACTCACGA	27420
GGCTGAGGCA	AGAGAATCGC	TTTAATCTGG	GAGGTGGAGT	TTGCAGTGAG	CCAAGATCTC	27480
TCCACTGCAC	TCCAGCCTGG	GTGACACAGC	AAGACTCTAT	СТСААААСАА	CAATAACAAC	27540
AACAACGAAA	AACATTTAAT	GGCTGCACCT	TGCCTGTGAA	AAATGCATTT	CTTGGCCAGA	27600
TGTGGTGGCT	CAAACCTGTA	ATCCCAACAC	TTTGGGAAGC	TAAGGCCAGG	AGTTCGAGAC	27660
GAGCTGGGAT	ATATAGGAAG	ACACAATCTC	TACAAAAAA	AATCCACAAA	ATTAGTCAGG	27720
CTTAGTGTTC	ATGCCTGTAG	TCCCAGGTAC	TCAGGAGGCT	GAGGCAGGAT	TCCTCAAGCC	27780
CAGGAGTTCA	AGGCTTCCGT	GAGCTATGAT	GGCACAACTG	CACTCCATCT	TGGGTGACAG	27840
AGCAAGGTCC	TATCTCTGGA	GAAAAAAAA	AAAGAAGGCA	TTTCTTAGGA	GAGTTCTTCT	27900
CTGTAGAGTC	CTAAGGGTTC	CATGGAACTC	CTTAAAAGCA	TCAGAGTATG	TGAGTGCAAT	27960
GGGAGGAAGC	ATTTAGCCAG	AGCAGTTGTG	CTCCCATTGC	ATATTAATTT	TTAAAAAACA	28020
AAGCTATAAA	AAAAAGTTGA	AAACTACTAC	GTTAGCATCA	GCCTGACATT	TAATGGCCTC	28080
GTAAATCAAA	CCTTAATTGA	CTTTTTAGCC	AGTTATGCTA	CTAGCCAACT	ACAGACAACA	28140
CACTTTTTAA	CCAAATTAGA	CTAATAGTTG	TCATCAGTGG	AAATCAAGTT	TGCCATTCTT	28200
CCATGCCTTT	GCTCACACCA	TTACCTTTTC	TGGAATGTCC	TGTACTCATC	TTCCTGTGTT	28260
GAACTCTATA	CCCAACTTTA	AAAACCTAGC	TCAAAGTTCA	ACACTTCCAT	TCCATTTCAA	28320
AAAGAGCTTT	CCTCTTCCTT	AAAGTTTAAG	AACTCATTTT	CATGAATCTT	TTTGGCATTT	28380
ATTGCACACA	TGCTTGCTTT	GTGTTATTTG	TGTTCATGCC	TCATATGCCC	CCAAGGTGTT	28440
				CT 1		

TTAGACTCCT TAACGGCAAA AATGATGCTC TAAACACCTT TCTATCTTTC ATAGTGTCTT 28500 AGTCTGTTTG TGTTGCTATA AAGGAATACC TGAGGCTGGG GAATTTATTT AAAAAAAGAGG 28560 TTTATTTGGC TCACAGTTCT GCAGCTATAT AAGAAGCATA GTGTCAGCAT CTGCTTCAGG 28620 TGAGGGCTTC AGGAAGTTTC CACCCATGGT AGAAGGCAAA GGGGAGCAGG CATCACATAT 28680 CAAGAGAGGA GGAAAAAAA GAAGGAAGAA AGGAGGGTGC CATTCTCTTT CAACAATCAG 28740 TTCTTGTGGG AACTAATGGG ACAAGAGGCT GGGCACGGTG GCTCATGCCT GTAATCCCAG 28800 CCCTTTGGGA GACCAAGGTG GGTGGATCAC CAGAAGTCAG AAGCCTGAGA CCAGCCTGGC 28860 CAATGTGGTG AAACTCCGTC TCTACTAAAG ATACATAAAT TAGATCTAGC TGGGCCTGGT 28920 GGCGTGTACC TGTAGTCCCA GATACTCAGG AGGCTGAGGT AGGATAATCA CTTGAACCCG 28980 GAAGACAGAG GTTGCAGTGA GCTTGTGCCA CTGCACTCCA GCCGGGGCAA CAGAGTGAGA 29040 CGGTCTCAAA AAATTTTAAA AACTTTAAAA ATAATAGAGC AAGAAAGCAC CAAGTTATTC 29100 AGGAGGGATC CACCCCAAT GACTCAAATA CCTCCCACCA GGCCTCACTT CCAACACTGG 29160 GGATCAATTT CCGTATGAGA TTTGGAGGAG ACAAATATCC AAACTATATC ACATAGTAAT 29220 GAACATAGTA CCTTATCTAT AGAAAGCAAT GGCTAGACAA CTGTTGAATG GCTAACCAAA 29280 TCTGCTTTCC TATGGTCTCG CTCTAGAGGG GGTCAGTATG AGTTTCTGTC AAAAGGAGAA 29340 AAAAAATGT ATAGTCAGTT TTGTGTGTGT GTGTGTTCAT GTAAAAGAGA TCAAGAGAAA 29400 AGAACAAGAG AAATCATGAA AAGGAGGGGG AATATAAGAA TAATACATAG AAAAAAGCAA 29460 ATTATCTTGT TTATCAGTAA TACCCAAGGG GGTAGAAATG GTAAGTAATA ATCCTTCTTC 29520 ACTITIGATING TAGTICACTI TITTIGCACCI TIATITITGAT GAATICACAT CGAAGACATI 29580 AACTCATTAA GGCTTCCAAT ATTTTTGGAG ATAAGAAGGG CTGCTATGCT CTTTATAGAT 29640 GGAAAACTTG GGTCATTAAT AACTCAAACA AGGACATAAC AAAGAAATGG AGCATAAACT 29700 GCCAGGTCCT GACTGTAGAT TTGGATTCCC AGTTGGTGTC TTGTCACCCT TTGTTACTCT 29760 TCCTAAAGTT ATGATCTTTT CTTGTGCATA GGAAATTCAT AGTGATTTCC CATCACCCTT 29820

GGGATTATCA	TAGCTCCTTT	AAGGTCCCCT	CTATGCACTC	AATAACATCA	ACAGTAAGTG	29880
TTCTTCGAGC	ACTTACTGAG	TGTATATCAT	TGTGTTCTCA	CGCAGCACCC	ACAGATCTCA	29940
CCAAGAACCT	AGCTGAAGCC	TGTAGAATGA	ATAGGTAAGT	ACTGCCATGC	CAATCTGGAG	30000
TACTCAAGCG	ATGCAAATGA	TTCCTTTAAT	TGTACTTTTG	CAGGCTTGTC	AGTTTTGCTC	30060
ATGGAGAAGT	GGCTACTGCA	TCCATGTTAT	ATCTATGTAA	TGTTGGACTG	CGAAGCATCA	30120
CTTGACTTTT	TCCAAGCAGA	AATTACAGCT	GATGACAAGC	TGCTGCTGAG	AAAATGGATA	30180
TTTTTCTGAA	TTCAGTTCTA	CGTGGAAACA	GCTGACTAGT	TTCCATTGCT	GTAAGATGGC	30240
TCTTTTGCTC	TTGGTTGATT	TTGAGTAATG	GCTTTACTTC	TGTAGAAAGG	AGATTTCATT	30300
TGAAGTCCAC	TCAGGGATTT	GGTTCAACAA	ACTGGAGTAC	AGGTTTCAGA	AAATATCTCT	30360
TTAATCCTCC	ААТААТААТ	TTTCTCATCT	ATAATTCCTG	GAACACTTCA	TCCTTTGCAG	30420
CCGAGCATAT	AGATAGATTT	GTTGCTCACT	GTGTTCTGAT	TGCCACTTTG	ACCTGCTTTT	30480
TCAACTTAGG	TTACAAATAG	AACAGAATCT	CTCTGATTTT	TCTCATTAAT	TGTTTGAATT	30540
CCCACTTTTC	CTCATTAGCA	AGAAGTCCAG	TATCTTCCTG	AGAACTTCCT	TTTCTCAATC	30600
TAGGAACTTA	CTTGGTCCAT	AAGGTAACAG	TCTTATTTCT	GACTATCAAG	GAGAGAAATA	30660
ACAGGAGCCA	TTATCATCTT	CATGGTGTCA	CTTTTGAAAA	CTGGTCCTCT	GTAGATCTTC	30720
AGATTCTTGC	GTTAGTCCAT	TCAGCTGCTA	TAACAAATT	GCATAGACAG	CATGGCTTAT	30780
AAATAACAGA	AATGTATTTC	TGACAGTTCT	GAAGGCTAGA	AAGTCAAAGA	TTAAGACACT	30840
GGCTGATTTG	GTGTCTGGCG	AAGGCCCATT	TGCTCATAGA	TGGACGATGA	CCTTTCACTC	30900
TGTCTGCACA	TGGCAGAAGG	GCAAGAGAGC	TCTCTGGGTC	TTTTTTATAA	GGGCACTAAT	30960
CTCATTTTTG	AGGACCCTGC	CCCCATGACT	TAATCACCTC	CCAAAGGCAC	TGTCTCCCAA	31020
TACCATCACC	TTGAGGGTTA	GGATTTCAAC	ATATGATTTT	GGGGGGACAG	AAACACGCAG	31080
TCCATCTCGC	TTGTCCACTC	CATGGTGGTA	TTCTTGCTGG	ATCAGTTTCC	TCCTTGGGGT	31140
GCATTTGTGT	TCCATGTCTA	ACTTGCAAGT	TATAGCAGGC	CCGATAGCAA	AGTATTCCAA	31200

TGTTGGTATG	CAGAGGCATT	GAATAATCAG	AATGAACCCA	CGCCATAAAC	AACTGGTAGA	31260				
GCTGCAGAGA	GTACCAGCTG	ATTATGAGCC	CTGGGTAACA	GTGGTTTTTA	GTTCCTATGT	31320				
CCGTCAGCCC	TTTTCTCCCA	TAGTAGCCCC	ACTGTGTTGA	AGTGGCTGAA	TCGACAGAAG	31380				
CTTCCAGCTT	GGGCCACATG	CTCATGGAAC	CAATTCTCCT	TATGAGCCGT	ACAAGAGCTG	31440				
GGTTGCCATT	CTGGATACCC	TCTTTCTTCA	AGAGATTTTA	TTTCAAGGAT	ATTTTTTCTT	31500				
ТТАТСААСТА	CAGGGATTAT	TTAGAATCTT	AGGGCAGTGG	TGCCCAACCT	TTTTGGCCCC	31560				
AGGGACAGGT	TTTGTGGGAG	ACAATTTTTC	CATGGACCAG	TGTCAGGGGG	CTGGGAGGCA	31620				
TGGTTTTGGG	ATGAGTCAAG	TACATTACGT	TTGTTGTATA	CTTTATTTCT	АТТАТТАТТА	31680				
TATTGTAATA	TATAATGAAA	TAATTACACA	ACTCACCATA	ATGTAGGAAT	CAGTGGGGAG	31740				
CCCTAAGTTT	GTTTTCCTGC	AACTAGACAG	TCCCATCTGG	GGGCAATGGG	AGATAGTGAC	31800				
AGATCATCAA	GCATTAGATT	CTCATAAGGA	GTGCTCAGCC	TAGATCCCCG	GCATGTGCAG	31860				
TTCACAATAG	GATTTGCTCA	CCTATGAGAA	TCTAATGCCA	CTGCTGATCT	GACAGGAGGT	31920				
GGAGCTCGGG	CAGTAATGCG	AGGGTTGGGG	AGCAGCTGTC	AATATAGATG	AAGCTTTGCT	31980				
CGCTCGCCTG	CCACTCACCT	CCTGCTGTGT	GGTCCACTTC	CTAACAGGTC	ACAGACTGGT	32040				
ACTGGTCCAT	GGCCAGGGAG	TTGGGACCCT	GTCTTAGGGA	GTAGGGGTGG	AGTTCCCTTC	32100				
ACTTCTAGAA	GGCCCTGGAT	TAGTATCCCA	GAGCTGTCAT	TACAGAGTAT	CACAAACCAG	32160				
GTGGCTAAAA	ACAGACATGA	ATTCTCTCTT	ATTTTTGATG	GCTTGGAAGT	CCAAAGTCAA	32220				
GGTGCTGCCA	GGGCCATGCT	CCCTCTGAAA	TGTGTAGGGG	AGAATCCTTC	CTTCCTCTTT	32280				
CTAGCTTCTG	GTGGTTTGCT	GGCAATCACT	GGCATCGCTT	GGCTTGCAGC	ACTTCAACAT	32340				
CTGCCTTTAC	TGTCTCATAG	TGTTCTCCCC	TCATGTCTCC	AGGTCTCTCT	GTCTCTCTTC	32400				
TTTGTATAAG	GAAACTAGTC	ATATTGGATT	AAGGGCCAAC	CCTACTCTAG	TATGACCTCA	32460				
TCTTAAGGTC	ACATGCAATG	ACTATTCCAG	ATAAGGTCAC	ATTCTGAAGA	ACTGGGAGTT	32520				
AGGACTTCAT	ATCTTTTGAA	GGAACACAGT	TCAACCAATA	ACAGCCCCTG	TACTGTTTTA	32580				
SUBSTITUTE SHEET (Rule 26)										

GCARARATACC TRATTATGTA ACCTTARCCT AGGATCATAG ATCCCTACTT GTCTGGTGCT 32760 TTTATARGCC ACAGAACCAC CCGGGARATC ATTATTARGA CAAGGARAGG CCAAGTGCAG 32760 TGGTTCATGC CTGTAATCCC AGCACTTTGG GAAATTGAGG CGAGTGGATC ACCTGAAGTC 32820 AAGAGTTTGA GACCARACTG ACCAGCATGA CAGAACCCCA TCTTTACTAA ARATACARAA 32880 ATTAGTTGGG CATGGTGGCA TGTGCCTGTA ATCCCAGCTA CTCARAAGAC TGAGGCAGGA 32940 AAATCACTTG AACCGAGGAT GCCAAGATAG CAGTGAGCCA ATATCGTGCC ACTGCACTCC 33000 AGTCTGGATG ATAGAGCAAG ATCCTGTCT AAAAAATTAA TAAATAAATA AAAAGACAAG 33060 GAAAGCCTTT TCCAAGGAGA CCCTTCTGCT TTGCTAGTTC AGAGAACTTC TCTTTGGAGA 33120 AAACAAACAC CCAGTCCATT AGCAGCAACG TCAGGGATTG AATTCTTAGG GCAGCAGGCT 33180 GGGCACAGTG GCTCATGCCT GTAATCCCAG TACTTTGGGA GGCTGAGATC GTTACAAAAA 33300 ATATGAAAAA AAAAAAAAAG CCAGCCTGGC CAACATGGTG AAAACTCATC TCTACAAAAA 33300 ATATGAAAAA AAAAAAAAAG CTGGGTGTGT TGGCTTATGC CTGTAGTCTC AGCTACCTGG 33360 GAGGCTGAAG CAGGAGAATC ACTTGAACCC GGGAGTTGGA GGTTGCAGTG AGCTGAGATT 33420 GCCCTACTGT ACTCCAACCT GGGTGACAGA GAGAGACTCC ATCTCAAAAA AATAAAGAAT 33480 TCTTCGGGCA GCAGTCTTTC CTCCACCTCA TAGACCATGG AGGTGAGCCA GCTCTGACAA 33540 ACCATGAGAA CAATGGCAGA GACATACCTG TAAGCCATGG AGGTGAGCCA GCTCTGACAA 33540 ACCATGAGAA CAATGGCAGA GACATACCTG TAAGCCATGG AGGTGAGCCA CCACTAGCAG 33660 TGAGGAAAAT GACAAGTTTG AGGAACTATG AGACCAGGCA GTGGGGAACA CCACTAGCAG 33600 TGAGGAAAAT GACAAGTTTG AGGAACTATG AGACCAGGCA GTGGGGAACA CCACTAGCAG 33600 CCCTCCAGGGA AAGGAGATGG GCTCCAGAGG CAGAAGAGGA CGTCTGAAGAC 33720 CCTCCAGGGA AAGGAGATGG GCTCCAGAGG CAGAAGAGGA CGTTGAAGAC 33780 GGGTGAAATA TATAGACGAT GGGGACCAC CAGAGAGAGA CGTTGAAGAG AATGGGGAGT 33780 GGGTGAAATA TATAGACGAT GGGGACCAC CAGAGAGAG CGTTGAAGAG AATGGGGAGT TGGGGAACA CTGGGGAACA CCACTAGCAG 33840 GAAGGAGAGT CTGGAGGGG TGGTGGGAAC CCAGGGCAG GCTTTTGCA AAACTGAGGA 33840 GAAGGAGAGT CTGGAGGGG TGGTGGGAAC CCAGGGAGAGG CGTTGAAAGG AAACTGAGGA 33840 GAAGGAGAGT CTGGAGGGG TGGTGGGAAC CCAGGGGAG CTGGGGAACA CCGCTAGAAGA 33900	CAAATAGGTA	TTCCTCTCCT	TCCCAAAGTT	CTTCATAGCA	GAGACAACTT	GTACCAAAAG	32640
TGGTTCATGC CTGTAATCCC AGCACTTTGG GAAATTGAGG CGAGTGGATC ACCTGAAGTC 32820 AAGAGTTTGA GACCAAACTG ACCAGCATGA CAGAACCCCA TCTTTACTAA AAATACAAAA 32880 ATTAGTTGGG CATGGTGGCA TGTGCCTGTA ATCCCAGCTA CTCAAAAGAC TGAGGCAGGA 32940 AAATCACTTG AACCGAGGAT GCCAAGATAG CAGTGAGCCA ATATCGTGCC ACTGCACTCC 33000 AGTCTGGATG ATAGAGCAAG ATCCTGTCTC AAAAAATTAA TAAATAAATA AAAAGCAAG 33060 GAAAGCCTTT TCCAAGGAGA CCCTTCTGCT TTGCTAGTTC AGAGAACTTC TCTTTGGAGA 33120 AAACAAACAC CCAGTCCATT AGCAGCAACG TCAGGGATTG AATTCTTAGG GCAGCAGGCT 33180 GGGCACAGTG GCTCATGCCT GTAATCCCAG TACTTTGGGA GGCTGAGATG GGTGGATCAC 33240 TTGACATCAG GTGTTCGAGA CCAGCCTGGC CAACATGGTG AAAACTCATC TCTACAAAAA 33300 ATATGAAAAA AAAAAAAAAG CTGGGTGTGT TGGCTTATGC CTGTAGTCTC AGCTACCTGG 33360 GAGGCTGAAG CAGGAGAATC ACTTGAACCC GGGAGTTGGA GGTTGCAGTG AGCTGAGATT 33420 GCCCTACTGT ACTCCAACCT GGGTGACAGA GAGAGACTCC ATCTCAAAAA AATAAAGAAT 33480 TCTTCGGGCA GCAGTCTTTC CTCCACCTCA TAGACCATGG AGGTGAGCCA GCTCTGACAA 33540 ACCATGAGAA CAATGGCAGA GACATACCTG TAACGTAACT GACTGGGGCA AAGACAAAGG 33600 TGAGGAAAAT GACAAGTTTG AGGAACTATG AGACCAGGCA GTGGGGAACA CCACTAGCAG 33660 AAATGATGGA AGTTCTCAAG AATAACAACA GAGAAATAGA CCATGGCCAG AGTCTAGAAC 33720 CCCCCAGGGA AAGGAGATGG GCTCCAGAGG CAGAAATAGA CCATGGCCAG AGTCTAGAAC 33780 GGGTGAAATA TATAGACGAT GGGGACCACC CAAGAGGAG CGTTGAAGAG AAACTGAGGA 33780 GGGTGAAATA TATAGACGAT GGGGACCACC CAAGAGGAGT CGCTATTGCA AAACTGAGGA 33640 GAACGAGAGT CTGGAGGGG TGGTGGGAAC CCACTAGCAG 33640 GAACGAGAGT CTGGAGGGG TGGTGGGAAC CCACTAGCAG AAACCAAAAG 33780	GCAAAATACC	TTATTATGTA	ACCTTAACCT	AGGATCATAG	ATCCCTACTT	GTCTGGTGCT	32700
AAGAGTTTGA GACCAAACTG ACCAGCATGA CAGAACCCCA TCTTTACTAA AAATACAAAA 32880 ATTAGTTGGG CATGGTGGCA TGTGCCTGTA ATCCCAGCTA CTCAAAAGAC TGAGGCAGGA 32940 AAATCACTTG AACCGAGGAT GCCAAGATAG CAGTGAGCCA ATATCGTGCC ACTGCACTCC 33000 AGTCTGGATG ATAGAGCAAG ATCCTGTCTC AAAAAATTAA TAAATAAATA AAAAGACAAG 33060 GAAAGCCTTT TCCAAGGAGA CCCTTCTGCT TTGCTAGTTC AGAGAACTTC TCTTTGGAGA 33120 AAACAAACAC CCAGTCCATT AGCAGCAACG TCAGGGATTG AATTCTTAGG GCAGCAGGCT 33180 GGGCACAGTG GCTCATGCCT GTAATCCCAG TACTTTGGGA GGCTGAGATG GGTGGATCAC 33240 TTGACATCAG GTGTTCGAGA CCAGCCTGGC CAACATGGTG AAAACTCATC TCTACAAAAA 33300 ATATGAAAAA AAAAAAAAAAC CTGGGTGTT TGGCTTATGC CTGTAGTCTC AGCTACCTGG 33360 GAGGCTGAAG CAGGAGAATC ACTTGAACCC GGGAGTTGGA GGTTGCAGTG AGCTGAGATT 33420 GCCCTACTGT ACTCCAACCT GGGTGACAGA GAGAGACTCC ATCTCAAAAA AATAAAGAAT 33480 TCTTCGGGCA GCAGTCTTTC CTCCACCTCA TAGACCATGG AGGTGAGCCA GCTCTGACAA 33540 ACCATGAGAA CAATGGCAGA GACATACCTG TAACGTAACT GACTGGGGCA AAGACAAAGG 33600 TGAGGAAAAT GACAAGTTTG AGGAACTATG AGACCATGG AGGTGAGCCA GCTCTGACAA 33540 AAATGATGGA AGTTCTCAAG AATAACAACA GAGAAATAGA CCATGGCCAG AGTCTAGAAC 33720 CCTCCAGGGA AAGGAGATGG GCTCCAGAGG CAGAGAGAG CCACTAGCAG 33780 GGGTGAAAATA TATAGACGAT GGGGACCACC CAAGAGCAGT CGCTATTGCA AAACTGAGGA 33780 GAAGGAGAGT CTGGAGGGG TGGTGGGAAC CCACTAGCAG 33600 GAAGGAGAGT CTGGAGGGG TGGTGGGAAC CCACTAGCAG 33780 GGGTGAAAATA TATAGACGAT GGGGACCACC CAAGAGCAGT CGCTATTGCA AAACTGAGGA 33840 GAAGGAGAGT CTGGAGGGG TGGTGGGAAC CTAGGAGGT TTGACAAAAG 33900	TTTATAAGCC	ACAGAACCAC	CCGGGAAATC	ATTATTAAGA	CAAGGAAAGG	CCAAGTGCAG	32760
ATTAGTTGGG CATGGTGGCA TGTGCCTGTA ATCCCAGCTA CTCAAAAGAC TGAGGCAGGA 32940 AAATCACTTG AACCGAGGAT GCCAAGATAG CAGTGAGCCA ATATCGTGCC ACTGCACTCC 33000 AGTCTGGATG ATAGAGCAAG ATCCTGTCTC AAAAAATTAA TAAATAAATA AAAAGCAAG 33060 GAAAGCCTTT TCCAAGGAGA CCCTTCTGCT TTGCTAGTTC AGAGAACTTC TCTTTGGAGA 33120 AAACAAACAC CCAGTCCATT AGCAGCAACG TCAGGGATTG AATTCTTAGG GCAGCAGGCT 33180 GGGCACAGTG GCTCATGCCT GTAATCCCAG TACTTTGGGA GGCTGAGATC GGTGGATCAC 33240 TTGACATCAG GTGTTCGAGA CCAGCCTGGC CAACATGGTG AAAACTCATC TCTACAAAAA 33300 ATATGAAAAA AAAAAAAAAA CCTGGGTGTGT TGGCTTATGC CTGTAGTCTC AGCTACCTGG 33360 GAGGCTGAAG CAGGAGAATC ACTTGAACCC GGGAGTTGGA GGTTGCAGTG AGCTGAGATT 33420 GCCCTACTGT ACTCCAACCT GGGTGACAGA GAGAGACTCC ATCTCAAAAA AATAAAGAAT 33480 TCTTCGGGCA GCAGTCTTTC CTCCACCTCA TAGACCATGG AGGTGAGCCA GCTCTGACAA 33540 ACCATGAGAAA CAATGGCAGA GACAATACCTG TAACGTAACT GACTGGGGCA AAGACAAAGG 33600 TGAGGAAAAT GACAAGTTTG AGGAACTATG AGACCAGGCA GTGGGGAACA CCACTAGCAG 33720 CCTCCAGGGA AAGGAGATGG GCTCCAGAGG CAGAAGAGGA CCATTGGAAC 33720 CCTCCAGGGA AAGGAGATGG GCTCCAGAGG CAGAAGAGGA CCTTGAAGAG 33780 GGGTGAAATA TATAGACGAT GGGGACCACC CAAGAGCAGT CGCTATTGCA AAACTGAGGA 33780 GAAGGAGAGT CTGGAGGGGG TGGTGGGAAC CTAGGGCAT TTGACAAAAG 33840 GAAGGAGAGT CTGGAGGGGG TGGTGGGAAC CTAGGGCTT TTGACAAAAG 33840 GAAGGAGAGT CTGGAGGGGG TGGTGGGAAC CTAGGGCTT TTGACAAAAG 33840	TGGTTCATGC	CTGTAATCCC	AGCACTTTGG	GAAATTGAGG	CGAGTGGATC	ACCTGAAGTC	32820
AAATCACTTG AACCGAGGAT GCCAAGATAG CAGTGAGCCA ATATCGTGCC ACTGCACTCC 33000 AGTCTGGATG ATAGAGCAAG ATCCTGTCTC AAAAAATTAA TAAATAAATA AAAAGACAAG 33060 GAAAGCCTTT TCCAAGGAGA CCCTTCTGCT TTGCTAGTTC AGAGAACTTC TCTTTGGAGA 33120 AAACAAACAC CCAGTCCATT AGCAGCAACG TCAGGGATTG AATTCTTAGG GCAGCAGGCT 33180 GGGCACAGTG GCTCATGCCT GTAATCCCAG TACTTTGGGA GGCTGAGATG GGTGGATCAC 33240 TTGACATCAG GTGTTCGAGA CCAGCCTGGC CAACATGGTG AAAACTCATC TCTACAAAAA 33300 ATATGAAAAA AAAAAAAAAA CCTGGGTGTGT TGGCTTATGC CTGTAGTCTC AGCTACCTGG 33360 GAGGCTGAAG CAGGAGAATC ACTTGAACCC GGGAGTTGGA GGTTGCAGTG AGCTGAGATT 33420 GCCCTACTGT ACTCCAACCT GGGTGACAGA GAGAGACTCC ATCTCAAAAA AATAAAGAAT 33480 TCTTCGGGCA GCAGTCTTTC CTCCACCTCA TAGACCATGG AGGTGAGCCA GCTCTGACAA 33540 ACCATGAGAA CAATGGCAGA GACATACCTG TAACGTAACT GACTGGGGCA AAGACAAAGG 33600 TGAGGAAAAT GACAAGTTTG AGGAACTATG AGACCATGGA GTGGGGAACA CCACTAGCAG 33660 AAATGATGGA AGTTCTCAAG AATAACAACA GAGAAAATGA CCATGGCCAG AGTCTAGAAC 33720 CCTCCAGGGA AAGGAGATGG GCTCCAGAGG CAGAAGAGGA CGTTGAAAGG 33780 GGGTGAAATA TATAGACGAT GGGGACCACC CAAGAGCAGT CGCTATTGCA AAACTGAGGA 33840 GAAGGAGAGT CTGGAGGGGG TGGTGGGAAC CCGCTATTGCA AAACTGAGGA 33840 GAAGGAGAGGT CTGGAGGGGG TGGTGGGAAC CTGGGGGATT TTGACAAAAG 33900	AAGAGTTTGA	GACCAAACTG	ACCAGCATGA	CAGAACCCCA	TCTTTACTAA	AAATACAAAA	32880
AGTCTGGATG ATAGAGCAAG ATCCTGTCTC AAAAAATTAA TAAATAAATA AAAAGACAAG 33060 GAAAGCCTTT TCCAAGGAGA CCCTTCTGCT TTGCTAGTTC AGAGAACTTC TCTTTGGAGA 33120 AAACAAACAC CCAGTCCATT AGCAGCAACG TCAGGGATTG AATTCTTAGG GCAGCAGGCT 33180 GGGCACAGTG GCTCATGCCT GTAATCCCAG TACTTTGGGA GGCTGAGATC GGTGGATCAC 33240 TTGACATCAG GTGTTCGAGA CCAGCCTGGC CAACATGGTG AAAACTCATC TCTACAAAAA 33300 ATATGAAAAA AAAAAAAAAG CTGGGTGTT TGGCTTATGC CTGTAGTCTC AGCTACCTGG 33360 GAGGCTGAAG CAGGAGAATC ACTTGAACCC GGGAGTTGGA GGTTGCAGTG AGCTGAGATT 33420 GCCCTACTGT ACTCCAACCT GGGTGACAGA GAGAGACTCC ATCTCAAAAA AATAAAGAAT 33480 TCTTCGGGCA GCAGTCTTTC CTCCACCTCA TAGACCATGG AGGTGAGCCA GCTCTGACAA 33540 ACCATGAGAA CAATGGCAGA GACATACCTG TAACGTAACT GACTGGGGCA AAGACAAAGG 33600 TGAGGAAAAT GACAAGTTTG AGGAACTATG AGACCAAGGC GTGGGGAACA CCACTAGCAG 33660 AAATGATGGA AGTTCTCAAG AATAACAACA GAGAAATAGA CCATGGCCAG AGTCTAGAAC 33720 CCTCCAGGGA AAGGAGATGG GCTCCAGAGG CAGAAATAGA CGTTGAAGGG AATGGGGAGT 33780 GGGTGAAATA TATAGACGAT GGGGACCACC CAAGAGCAGT CGCTATTGCA AAACTGAGGA 33840 GAAGGAGAGT CTGGAGGGG TGGTGGGAAG CTGGGGTT TTGACAAAAG 33900	ATTAGTTGGG	CATGGTGGCA	TGTGCCTGTA	ATCCCAGCTA	CTCAAAAGAC	TGAGGCAGGA	32940
GAAAGCCTTT TCCAAGGAGA CCCTTCTGCT TTGCTAGTTC AGAGAACTTC TCTTTGGAGA 33120 AAACAAACAC CCAGTCCATT AGCAGCAACG TCAGGGATTG AATTCTTAGG GCAGCAGGCT 33180 GGGCACAGTG GCTCATGCCT GTAATCCCAG TACTTTGGGA GGCTGAGATG GGTGGATCAC 33240 TTGACATCAG GTGTTCGAGA CCAGCCTGGC CAACATGGTG AAAACTCATC TCTACAAAAA 33300 ATATGAAAAA AAAAAAAAAG CTGGGTGTT TGGCTTATGC CTGTAGTCTC AGCTACCTGG 33360 GAGGCTGAAG CAGGAGAATC ACTTGAACCC GGGAGTTGGA GGTTGCAGTG AGCTGAGATT 33420 GCCCTACTGT ACTCCAACCT GGGTGACAGA GAGAGACTCC ATCTCAAAAA AATAAAGAAT 33480 TCTTCGGGCA GCAGTCTTTC CTCCACCTCA TAGACCATGG AGGTGAGCCA GCTCTGACAA 33540 ACCATGAGAA CAATGGCAGA GACATACCTG TAACGTAACT GACTGGGGCA AAGACAAAGG 33600 TGAGGAAAAT GACAAGTTTG AGGAACTATG AGACCAGGCA GTGGGGAACA CCACTAGCAG 33660 AAATGATGGA AGTTCTCAAG AATAACAACA GAGAAATAGA CCATGGCCAG AGTCTAGAAC 33720 CCTCCAGGGA AAGGAGATGG GCTCCAGAGG CAGAAGAGGA CGTTGAAGGA AAACTGAGGA 33780 GGGTGAAATA TATAGACGAT GGGGACCACC CAAGAGCAGT CGCTATTGCA AAACTGAGGA 33840 GAAGGAGAGT CTGGAGGGGG TGGTGGGAAG CTGGGTCTCC TAAGGAGGTT TTGACAAAAG 33900	AAATCACTTG	AACCGAGGAT	GCCAAGATAG	CAGTGAGCCA	ATATCGTGCC	ACTGCACTCC	33000
AAACAAACAC CCAGTCCATT AGCAGCAACG TCAGGGATTG AATTCTTAGG GCAGCAGGCT 33180 GGGCACAGTG GCTCATGCCT GTAATCCCAG TACTTTGGGA GGCTGAGATG GGTGGATCAC 33240 TTGACATCAG GTGTTCGAGA CCAGCCTGGC CAACATGGTG AAAACTCATC TCTACAAAAA 33300 ATATGAAAAA AAAAAAAAAG CTGGGTGTGT TGGCTTATGC CTGTAGTCTC AGCTACCTGG 33360 GAGGCTGAAG CAGGAGAATC ACTTGAACCC GGGAGTTGGA GGTTGCAGTG AGCTGAGATT 33420 GCCCTACTGT ACTCCAACCT GGGTGACAGA GAGAGACTCC ATCTCAAAAA AATAAAGAAT 33480 TCTTCGGGCA GCAGTCTTTC CTCCACCTCA TAGACCATGG AGGTGAGCCA GCTCTGACAA 33540 ACCATGAGAA CAATGGCAGA GACATACCTG TAACGTAACT GACTGGGGCA AAGACAAAGG 33600 TGAGGAAAAT GACAAGTTTG AGGAACTATG AGACCAGGCA GTGGGGAACA CCACTAGCAG 33720 CCTCCAGGGA AAGGAGATGG GCTCCAGAGG CAGAAAAAGA CCATGGCCAG AGTCTAGAAC 33780 GGGTGAAATA TATAGACGAT GGGGACCACC CAAGAGCAGT CGCTATTGCA AAACTGAGGA 33840 GAAGGAGAGT CTGGAGGGG TGGTGGGAAG CTGGGGTT TTGACAAAAG 33900	AGTCTGGATG	ATAGAGCAAG	ATCCTGTCTC	ААААААТТАА	ТАААТАААТА	AAAAGACAAG	33060
GGGCACAGTG GCTCATGCCT GTAATCCCAG TACTTTGGGA GGCTGAGATG GGTGGATCAC TTGACATCAG GTGTTCGAGA CCAGCCTGGC CAACATGGTG AAAACTCATC TCTACAAAAA 33300 ATATGAAAAA AAAAAAAAAG CTGGGTGTT TGGCTTATGC CTGTAGTCTC AGCTACCTGG 33360 GAGGCTGAAG CAGGAGAATC ACTTGAACCC GGGAGTTGGA GGTTGCAGTG AGCTGAGATT 33420 GCCCTACTGT ACTCCAACCT GGGTGACAGA GAGAGACTCC ATCTCAAAAA AATAAAGAAT 33480 TCTTCGGGCA GCAGTCTTTC CTCCACCTCA TAGACCATGG AGGTGAGCCA GCTCTGACAA ACCATGAGAA CAATGGCAGA GACATACCTG TAACGTAACT GACTGGGGCA AAGACAAAGG 33600 TGAGGAAAAT GACAAGTTTG AGGAACTATG AGACCAGGCA GTGGGGAACA CCACTAGCAG AAATGATGGA AGTTCTCAAG AATAACAACA GAGAAATAGA CCATGGCCAG AGTCTAGAAC 33780 GCTCCAGGGA AAGGAGATGG GCTCCAGAGG CAGAAGAGAG CGTTGAAGGG AATGGGGAGT 33780 GGGTGAAATA TATAGACGAT GGGGACCACC CAAGAGCAGT CGCTATTGCA AAACTGAGGA 33900	GAAAGCCTTT	TCCAAGGAGA	CCCTTCTGCT	TTGCTAGTTC	AGAGAACTTC	TCTTTGGAGA	33120
TTGACATCAG GTGTTCGAGA CCAGCCTGGC CAACATGGTG AAAACTCATC TCTACAAAAA 33300 ATATGAAAAA AAAAAAAAAG CTGGGTGTGT TGGCTTATGC CTGTAGTCTC AGCTACCTGG 33360 GAGGCTGAAG CAGGAGAATC ACTTGAACCC GGGAGTTGGA GGTTGCAGTG AGCTGAGATT 33420 GCCCTACTGT ACTCCAACCT GGGTGACAGA GAGAGACTCC ATCTCAAAAA AATAAAGAAT 33480 TCTTCGGGCA GCAGTCTTTC CTCCACCTCA TAGACCATGG AGGTGAGCCA GCTCTGACAA 33540 ACCATGAGAA CAATGGCAGA GACATACCTG TAACGTAACT GACTGGGGCA AAGACAAAGG 33600 TGAGGAAAAT GACAAGTTTG AGGAACTATG AGACCAGGCA GTGGGGAACA CCACTAGCAG 33660 AAATGATGGA AGTTCTCAAG AATAACAACA GAGAAATAGA CCATGGCCAG AGTCTAGAAC 33720 CCTCCAGGGA AAGGAGATGG GCTCCAGAGG CAGAAGAGGA CGTTGAAGGG AATGGGGAGT 33780 GGGTGAAATA TATAGACGAT GGGGACCACC CAAGAGCAGT CGCTATTGCA AAACTGAGGA 33840 GAAGGAGAGT CTGGAGGGG TGGTGGGAAG CTGGGTCTCC TAAGGAGGTT TTGACAAAAG 33900	AAACAAACAC	CCAGTCCATT	AGCAGCAACG	TCAGGGATTG	AATTCTTAGG	GCAGCAGGCT	33180
ATATGAAAAA AAAAAAAAAG CTGGGTGTT TGGCTTATGC CTGTAGTCTC AGCTACCTGG 33360 GAGGCTGAAG CAGGAGAATC ACTTGAACCC GGGAGTTGGA GGTTGCAGTG AGCTGAGATT 33420 GCCCTACTGT ACTCCAACCT GGGTGACAGA GAGAGACTCC ATCTCAAAAA AATAAAGAAT 33480 TCTTCGGGCA GCAGTCTTTC CTCCACCTCA TAGACCATGG AGGTGAGCCA GCTCTGACAA 33540 ACCATGAGAA CAATGGCAGA GACATACCTG TAACGTAACT GACTGGGGCA AAGACAAAGG 33600 TGAGGAAAAT GACAAGTTTG AGGAACTATG AGACCAGGCA GTGGGGAACA CCACTAGCAG 33660 AAATGATGGA AGTTCTCAAG AATAACAACA GAGAAATAGA CCATGGCCAG AGTCTAGAAC 33720 CCTCCAGGGA AAGGAGATGG GCTCCAGAGG CAGAAGAGGA CGTTGAAGGG AATGGGGAGT 33780 GGGTGAAATA TATAGACGAT GGGGACCACC CAAGAGCAGT CGCTATTGCA AAACTGAGGA 33840 GAAGGAGAGT CTGGAGGGGG TGGTGGGAAG CTGGGTCTCC TAAGGAGGTT TTGACAAAAG 33900	GGGCACAGTG	GCTCATGCCT	GTAATCCCAG	TACTTTGGGA	GGCTGAGATG	GGTGGATCAC	33240
GAGGCTGAAG CAGGAGAATC ACTTGAACCC GGGAGTTGGA GGTTGCAGTG AGCTGAGATT 33420 GCCCTACTGT ACTCCAACCT GGGTGACAGA GAGAGACTCC ATCTCAAAAA AATAAAGAAT 33480 TCTTCGGGCA GCAGTCTTTC CTCCACCTCA TAGACCATGG AGGTGAGCCA GCTCTGACAA 33540 ACCATGAGAA CAATGGCAGA GACATACCTG TAACGTAACT GACTGGGGCA AAGACAAAGG 33600 TGAGGAAAAT GACAAGTTTG AGGAACTATG AGACCAGGCA GTGGGGAACA CCACTAGCAG 33660 AAATGATGGA AGTTCTCAAG AATAACAACA GAGAAATAGA CCATGGCCAG AGTCTAGAAC 33720 CCTCCAGGGA AAGGAGATGG GCTCCAGAGG CAGAAGAGGA CGTTGAAGGG AATGGGGAGT 33780 GGGTGAAATA TATAGACGAT GGGGACCACC CAAGAGCAGT CGCTATTGCA AAACTGAGGA 33840 GAAGGAGAGT CTGGAGGGG TGGTGGGAAG CTGGGTCTCC TAAGGAGGTT TTGACAAAAG 33900	TTGACATCAG	GTGTTCGAGA	CCAGCCTGGC	CAACATGGTG	AAAACTCATC	TCTACAAAAA	33300
GCCCTACTGT ACTCCAACCT GGGTGACAGA GAGAGACTCC ATCTCAAAAA AATAAAGAAT 33480 TCTTCGGGCA GCAGTCTTTC CTCCACCTCA TAGACCATGG AGGTGAGCCA GCTCTGACAA 33540 ACCATGAGAA CAATGGCAGA GACATACCTG TAACGTAACT GACTGGGGCA AAGACAAAGG 33600 TGAGGAAAAT GACAAGTTTG AGGAACTATG AGACCAGGCA GTGGGGAACA CCACTAGCAG 33660 AAATGATGGA AGTTCTCAAG AATAACAACA GAGAAATAGA CCATGGCCAG AGTCTAGAAC 33720 CCTCCAGGGA AAGGAGATGG GCTCCAGAGG CAGAAGAGGA CGTTGAAGGG AATGGGGAGT 33780 GGGTGAAATA TATAGACGAT GGGGACCACC CAAGAGCAGT CGCTATTGCA AAACTGAGGA 33840 GAAGGAGAGT CTGGAGGGG TGGTGGGAAG CTGGGTCTCC TAAGGAGGTT TTGACAAAAG 33900	ATATGAAAAA	AAAAAAAAG	CTGGGTGTGT	TGGCTTATGC	CTGTAGTCTC	AGCTACCTGG	33360
TCTTCGGGCA GCAGTCTTC CTCCACCTCA TAGACCATGG AGGTGAGCCA GCTCTGACAA 33540 ACCATGAGAA CAATGGCAGA GACATACCTG TAACGTAACT GACTGGGGCA AAGACAAAGG 33600 TGAGGAAAAT GACAAGTTTG AGGAACTATG AGACCAGGCA GTGGGGAACA CCACTAGCAG 33660 AAATGATGGA AGTTCTCAAG AATAACAACA GAGAAATAGA CCATGGCCAG AGTCTAGAAC 33720 CCTCCAGGGA AAGGAGATGG GCTCCAGAGG CAGAAGAGGA CGTTGAAGGG AATGGGGAGT 33780 GGGTGAAATA TATAGACGAT GGGGACCACC CAAGAGCAGT CGCTATTGCA AAACTGAGGA 33840 GAAGGAGAGT CTGGAGGGGG TGGTGGGAAG CTGGGTCTCC TAAGGAGGTT TTGACAAAAG 33900	GAGGCTGAAG	CAGGAGAATC	ACTTGAACCC	GGGAGTTGGA	GGTTGCAGTG	AGCTGAGATT	33420
ACCATGAGAA CAATGGCAGA GACATACCTG TAACGTAACT GACTGGGGCA AAGACAAAGG 33600 TGAGGAAAAT GACAAGTTTG AGGAACTATG AGACCAGGCA GTGGGGAACA CCACTAGCAG 33660 AAATGATGGA AGTTCTCAAG AATAACAACA GAGAAATAGA CCATGGCCAG AGTCTAGAAC 33720 CCTCCAGGGA AAGGAGATGG GCTCCAGAGG CAGAAGAGGA CGTTGAAGGG AATGGGGAGT 33780 GGGTGAAATA TATAGACGAT GGGGACCACC CAAGAGCAGT CGCTATTGCA AAACTGAGGA 33840 GAAGGAGAGT CTGGAGGGG TGGTGGGAAG CTGGGTCTCC TAAGGAGGTT TTGACAAAAG 33900	GCCCTACTGT	ACTCCAACCT	GGGTGACAGA	GAGAGACTCC	ATCTCAAAAA	AATAAAGAAT	33480
TGAGGAAAAT GACAAGTTTG AGGAACTATG AGACCAGGCA GTGGGGAACA CCACTAGCAG 33660 AAATGATGGA AGTTCTCAAG AATAACAACA GAGAAATAGA CCATGGCCAG AGTCTAGAAC 33720 CCTCCAGGGA AAGGAGATGG GCTCCAGAGG CAGAAGAGGA CGTTGAAGGG AATGGGGAGT 33780 GGGTGAAATA TATAGACGAT GGGGACCACC CAAGAGCAGT CGCTATTGCA AAACTGAGGA 33840 GAAGGAGAGT CTGGAGGGG TGGTGGGAAG CTGGGTCTCC TAAGGAGGTT TTGACAAAAG 33900	TCTTCGGGCA	GCAGTCTTTC	CTCCACCTCA	TAGACCATGG	AGGTGAGCCA	GCTCTGACAA	33540
AAATGATGGA AGTTCTCAAG AATAACAACA GAGAAATAGA CCATGGCCAG AGTCTAGAAC 33720 CCTCCAGGGA AAGGAGATGG GCTCCAGAGG CAGAAGAGGA CGTTGAAGGG AATGGGGAGT 33780 GGGTGAAATA TATAGACGAT GGGGACCACC CAAGAGCAGT CGCTATTGCA AAACTGAGGA 33840 GAAGGAGAGT CTGGAGGGG TGGTGGGAAG CTGGGTCTCC TAAGGAGGTT TTGACAAAAG 33900	ACCATGAGAA	CAATGGCAGA	GACATACCTG	TAACGTAACT	GACTGGGGCA	AAGACAAAGG	33600
CCTCCAGGGA AAGGAGATGG GCTCCAGAGG CAGAAGAGGA CGTTGAAGGG AATGGGGAGT 33780 GGGTGAAATA TATAGACGAT GGGGACCACC CAAGAGCAGT CGCTATTGCA AAACTGAGGA 33840 GAAGGAGAGT CTGGAGGGG TGGTGGGAAG CTGGGTCTCC TAAGGAGGTT TTGACAAAAG 33900	TGAGGAAAAT	GACAAGTTTG	AGGAACTATG	AGACCAGGCA	GTGGGGAACA	CCACTAGCAG	33660
GGGTGAAATA TATAGACGAT GGGGACCACC CAAGAGCAGT CGCTATTGCA AAACTGAGGA 33840 GAAGGAGAGT CTGGAGGGG TGGTGGGAAG CTGGGTCTCC TAAGGAGGTT TTGACAAAAG 33900	AAATGATGGA	AGTTCTCAAG	AATAACAACA	GAGAAATAGA	CCATGGCCAG	AGTCTAGAAC	33720
GAAGGAGAGT CTGGAGGGGG TGGTGGGAAG CTGGGTCTCC TAAGGAGGTT TTGACAAAAG 33900	CCTCCAGGGA	AAGGAGATGG	GCTCCAGAGG	CAGAAGAGGA	CGTTGAAGGG	AATGGGGAGT	33780
	GGGTGAAATA	TATAGACGAT	GGGGACCACC	CAAGAGCAGT	CGCTATTGCA	AAACTGAGGA	33840
CAGTCATGGA GCGGGCTTAG AAATCACAGT TGGGGACAGG GTAAAGTTCC TCGGGATATA 33960	GAAGGAGAGT	CTGGAGGGG	TGGTGGGAAG	CTGGGTCTCC	TAAGGAGGTT	TTGACAAAAG	33900
	CAGTCATGGA	GCGGGCTTAG	AAATCACAGT	TGGGGACAGG	GTAAAGTTCC	TCGGGATATA	33960

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GAGGATGAGA TTAGAAGAGG TTCCAACTAG GGTAGTGTGG AGAAAAGCAC TATTGACCCA 34020 AAAAGGAAGG AGAATGTGGG TGGAAGTGGC AGAGAAAGAG GGGTTTGAGC AGAGAGTGGT 34080 GATTTTTCTA ATGCAGAGTT GTGGGAGGTG GAGTGCAGGG AGCCAGGCTG GGTGGCTGTG 34140 CTGATGTGAT TAAGCACTTA CTGACTGCCA GGCAATGGGC TAAGTACCTG AGATGCTTTG 34200 TCTGTTATCC CTCCCGAAAC CCCTCTGAGC AGGTGCAGTT ATTATTCTCA CTTCACAGAT 34260 AAGGAAATTG AGGCACAGAG AATTGAGTAA CTTACCCAAG GTGACATAGC TCATATATGG 34320 TAAAGCAGGC TTTGAACTCA GTCTAGCTCC CGAACCTAAG CTTGTAACTA CTATGCTTTT 34380 CCCAAAAAA GGGGGCTGGC ACAAAAAGAG CTGAGGGGGG CTGGGCATGG TGGCTCATGC 34440 CTGTAATCCC AGCACTTCGG GAGACTGAGG CAGGTGGTTC ACCAGAGGTC AGGAGTTCGA 34500 GACCAGCCTG GTCAACATGG TGAAGCCCTG TCTCTACTAA AAATACAAAA ATTAGCTGGG 34560 TGTGGTGGTG TGCACCTGTA GTCCCAGCTA CTTTGGGAGG CTGAGGCAGG AGAATCGCTT 34620 GAACCCCAGA GGCGGATGTT GTAGTGAGCC AAGATCATGC CACTGGACTC CAGCCTGGGT 34680 GACAGAGTGA GACTCCATCC AAAAAAAAGA AGAGCTGAGG TGATGGCCAC CATCAGCATC 34740 AGCCTGGAAG TTATAGCAGG ATGCTAAGTT TCTCTAAAGC TGTCTTTCTT AGGACTTGAA 34800 AAAGATAACT TGGGTTTGTA TCCCATCTCT GCCATTAGTA GTTTACTGGC TTTGGATAAA 34860 TTACTTAGCC TTACTGAACC AACTTTGGAT TTTTATAGAG ATACTGTAAT GAAAGGAATA 34920 AGGTATCAGT CTTAGCAGAG CATCCAGAGT GTTCCTATTA AAACCTAAAT CATATCCTGT 34980 CATTGCTCTG CCCCAAACCA TTCAATGGCT TCCCAACTCA AAGTTAAAAA CTCATCTTTC 35040 CAGTGGCCTG CAAGAGCCTA TGCTATCCGG TGTCTGACCT CATCTGTTGT TCCTTTCTCC 35100 CTCCCTTTCT TGGCTCCAGA CGCACTCTGG TCTCCTTGCT GTTCCTTGAA TACACCAGGC 35160 ACACTCTTTT CACCTGAAAC ACTTTACCCC AGATATCTTA GCTTACTCTC TGCCTCCCTC 35220 AATTCATTGA TGAAATGTCT CAGTGAAGTC TTCTCTCTCT CCTCTGTAAA AGTATACTCT 35280 CTGTTCCCCT TCTTTACTGT TCTAGCTACT ATTGCTGTGT AACAAATCAC TCCCCAAATT 35340

TAATGAGTGA	AAACATCAGC	CATCATCTTA	TTTCTCACGG	TTTCTGAGGG	TCAGGAATTC	35400
TGGAAGGGCT	CAGCTGGGAG	GTTCTGGCTC	ТАТААТСТСТ	TATGCAGTGA	GAGTCAGATG	35460
CTGGCTAAAA	CTGAAACAAA	GCAGGGTTCT	AGTAGCTGAG	GGCTGGCTGG	GTCTCTCAGA	35520
TATAGTTCAG	ATCTCCTCCA	GGGGGTCTCT	CCACGTGGGC	TAGTCTGAAC	TTCCTCACAG	35580
CATGGTGGCC	TCAGGGCAGT	GGACTCTGCA	TAGTGGCTGA	AGGCTTCGCA	GCTGAGTATT	35640
CCAGCAAGCA	AAGTGGGAGC	TGTATTGCCT	CATATGACCC	AACCTTGGAA	TCCACACAGC	35700
ATCACTTCCG	TGTATTCTAC	GGGTTGAAAA	GTCACAAAAA	CCAACCAGTT	TCAAGGAGAA	35760
GGAACAGAGA	TCACATTTCT	CAATTGGAGA	AGGGTCAAAG	TCACATTGTA	ATCAGAGCCT	35820
ATGGGATACG	AAGTATTGCG	GTCAGGTATG	AAAAATTTGA	TTTGCTGCAT	CTGCTTTACT	35880
TTCTCCACAG	CGTTCATGAT	CTGCTTCTCA	CATGATATTG	ACTTACGTCA	TTTCTGCATT	35940
TCCTGTCTTC	CACACTAAAA	TGTCAGCCTG	TTTTGTTCAC	TGCTGTATCC	CCAGAGCCTA	36000
GCACGGAGCC	CAGCATGTAG	TGGTATCCAA	TAAATACTTG	TTGCATGAAT	GAATTCTGTC	36060
TTTTAATCCT	AGCTATAGGT	TTCTAAGTTA	ААТАТТАСТА	TAATCATCTT	ACAGACGAGG	36120
GAAATGAGGC	TCAAGAAGAT	TTGGTAACTT	ATGCGGGATC	ACTCAGCCAC	ATAATGGAAG	36180
AGACAGCATT	GAAGTACACA	TGCTTGCTCT	GTCTGCTCTT	CCAAGCTGCT	CATCACACAG	36240
CTGCACCTCT	GAGGACTTCC	CTCCCCAGTC	CACCTCCACC	CTTACCCAGA	GACACACATG	36300
GCCACAATCC	ACTAGCAGAC	СААААТТСАА	TTTTTCCCCA	GTTGGTTGCA	CTCAAGCTGA	36360
GAGCAAAGCA	ATTGCACTTT	AAATCCCCTT	ACAGCAGATA	TTTCAGAGCA	TGTTCGGAAG	36420
AACCCATCAC	ACTTGGCTTT	TAGATCTTAT	TTCTGGTTTG	TTACAAAAAC	ACAATTAAAT	36480
GAAAGGTTAG	GTAGCTTTTG	AATGGCCAGC	TCAAAGTTTT	GGCTTATTTT	TGCCTTGCTG	36540
TCTTTATAGG	CATTTTACCA	ATATTTATCA	CTATTTCCCT	TAGGGAACCC	TTAGATCTGT	36600
GATATTTGAA	ATAATAAAGC	CTCTCCATTG	GCCCTTTAAA	AGGTTTGTGG	TAAAACCACA	36660
CCATTAACAT	TCACAGTTCC	TTATTTATGA	GGCCTGATTG	CACTTATTTC	CATATTTCTC	36720

ACTGTTTCTC	CGATGAGGAT	TTCACATAAT	AGTGTTTGAA	GGCTAAAGAC	TTCAAAGCAG	36780
ATTCTTTACT	ATTTTTATCT	TGAAAAATAT	TCAATATTTG	TGTAATTAAA	GTGAAGTCTT	36840
CCTAGAGAAA	ATGACAACTC	АААТААТСТТ	AAATGTACCT	CCAAGAAAAA	AGCTGTCAAA	36900
GTGACATTTA	GTAGTAGAGT	САСАТТСТСТ	AAGGCCTTTG	СТТСТССТТС	TGAGTTCTTA	36960
TCATCTTTGA	AGGTTATGTC	ATGGCTGACT	TCAAATCACT	TTTAAAATTA	TTATGGCCTT	37020
CTTTAAATGT	GAGTTCTGAA	GGTGAGGGGC	TTTATCTTTC	TTTTGCTCCA	GATTTTTTCT	37080
ACCGCGTCAT	TACCAAGCAT	СТТААААСАА	ААССТААААА	САААААТСТТ	CCTTGACCTG	37140
GTTTTTCCCA	CTAGCTAACA	TCCTATTTT	ATCTTTCCCT	TTGCACTAAA	GGTTTTTAAA	37200
CGGATCTTTA	TACCCTCTGT	CTCCATTTTC	TCATCTGCTA	ACTTATATGG	CAAAGATTAC	37260
CACTGCCTTT	CAACATAATT	GGCCAATCTA	CAGAAAGTTT	TCAAGTTCTC	TTTTTAATTG	37320
ACCACCTCCT	GCCTACCTCC	CCACCTTTGA	CATCTTGCTT	CTCACTTGGC	ACCTTACCCA	37380
GTGTTCAAGA	TTCCCTCCTT	TAGGATGTCT	TCAGAGCAGC	TACACAGTTG	GTACTATAAT	37440
TTATACATCC	TTGTACACAG	GGCTTGCTGG	GATATTGATG	GAGAGAAGGA	GGAAACTGGA	37500
AGTAGTTCAG	GCCAGAGCTA	GGGAAATTGA	CCCATCTCCA	GGTCTCAGGT	CTGCAAGGG	37560
AGCTCACAGC	TTAACACATG	GAGTCTAGAA	ACTTGTGCTG	GACCTTGACC	AACACCAGCC	37620
CATGGAGTCC	AATACAGTGC	TCAATAGGGA	TTTCCAGGAA	ATTGCTATAT	TTATTCAAAG	37680
AGAACTTACC	AAGTGTCAGC	TACGTGTTGG	GCATTGTGTT	AGGCACAGGG	ACCACAAAGA	37740
TAAGACATTG	TAGCTTTCCT	TAAGTTGCTC	ACTGAGTAAA	TAGAGAGACA	GAAAGGTAAA	37800
CAGGTAAGTG	CAAAAATACA	TACAATTCTG	CAATAGTGTT	CATAGTGGCT	ATGGAGAGAA	37860
CGCTCACTAA	CTTTGTTTAA	ACAGTTGTTC	TTTCAAGGAT	TTGACATGGA	TTTGATTGGA	37920
AAAGCATGAT	ACCATTTTTT	GCAATTAAAC	ACAGGAATAC	АТАААТАААА	TGCATCAGTA	37980
TTTTTTACAA	ATAGCTACTA	AGAGCTACTA	GAAAACCTGG	GAATTCTTAA	AACCTTACCA	38040
TGCTACTTGC	TCTAAAATAT	ТТТАТТТАТ	GTTATTTTGT	ACATTTCTTT	ACCTACACAA	38100
				(D. 1. 0.0)		

ACACCACTGT	TTTCTTCATT	TCTTAGTCTA	TTTAAACCTC	ACACCCTTTC	AGCATCTCTT	38160
AATTATTTAC	TACCATCTGT	TAGTTCTCCT	GTCCTGAATG	АААСАААААТ	GGCAGAATGT	38220
AAAACGAGGG	CGAACAGATT	TTTGACAGGA	AGTATTCAGA	GGTAGAAGGA	AATAGTCAAG	38280
ACACATATGA	TAAACGAAAA	CAATAATAAC	ТТТАТАСАТА	ACAACTTATA	GACACATTTA	38340
AAAAGTTTAA	GATCTCAAGA	GCTATGTCTG	AATAGATAGA	AGTAAAAACT	CTATTAAGTA	38400
ATTAGGAAAA	TAACAAGAAC	AGTGAATTTC	TTAATGAATG	GCATGTAATC	AAAACTGTAC	38460
TTATCGTCTA	ATTCATAATC	TTGAATGTTT	TTATTTTATT	ТАТТТАТТТТ	TTTATTTTT	38520
GAGACAGAGT	CTTGCTCTGT	CACCCAGGCT	AGAGTACAGT	GGCGTGATCT	CAGCTCACTG	38580
CAACCTCCAC	CTCCCAGGTT	CAAGCGATTC	TGCTGCCTCA	GCCTCCTGAG	TAGCTGGGAT	38640
TACAGAGGCC	TGCCACTGCA	CCCGGCTAAT	TTCTGTATTT	TTAGTAGAGA	TGGGGTTTCA	38700
CCATCTTGGC	CAGGCTGGTC	TTGAACTCCT	GACCTCATGA	TCCACCAGCC	TTGGCCTCCC	38760
AAAGTGCTGG	GATTACAGGC	GTGAGCCACC	ACGCCTGGTC	GAATGTTTTT	ATTATTTGAA	38820
GAGACAACAT	GGGCCTTAAA	TCTGTCTTCT	ATTTGACAGA	CTTTGATGGA	GTCAAATCCC	38880
AATGCTGCCA	CTTACTGAAC	GGCCTTAAAT	GACTTAGTCT	CTCTCAGCTG	TCTTTCTGCA	38940
TATGTAAGGT	GGAATAATGA	TGGCTTCAAG	GAGGAATAAA	CCTATGAAAA	GTGTTGAGGA	39000
TAGTGTCTGA	TATGAAATAA	GGATTCAACA	AGTAGTAGCT	GCTATTGAAG	ATTTAAGAGT	39060
ТАТТТАТТАС	AACTATTTAA	TAAAATTTTA	ААААСТААТА	CACTTAAATT	ATTAAAGAGC	39120
TTTGAAATGG	GCCAGGCGCA	GTAGCTCCTG	CCTGTAATCC	CAACACTTTG	GGAGGCCAAG	39180
GTGGGCGGAT	CACCTGAGGT	CAGGAGTTTA	AGACCAGCCT	GGCCAACATG	GTGAAACCCT	39240
GTCTCTACTA	AAAACGCAAA	AATTAGCCAG	GTGTGGTGGC	ATGCACCTGT	AGTCCCAACT	39300
ACTCAGGAGG	TTGAGGGAGG	AGAATTGCTT	GAACCTAGGA	GCTGGAGGTT	GCAGTGACCC	39360
GAGATGTCAC	TGCACTCCAG	CCTGGCAACA	GAGCAAGACT	CCATAAAGAC	AACAAAAGCT	39420
TTGAAATTGT	GTAAATGAGT	TGTACCTATC	TTCATTTAAG	AAATTCATCT	TTGTTCATCT	39480

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ATTTTTACTT	GACATGAGAG	CTTCCAGCAA	TTTTTAATTA	AGCCCTCACA	GATTTTATGT	39540
CACTGGCTAT	GTGATAAACA	AATTATTTGC	ТААААТААТА	TTCTTGCTTC	TTTTTTAAGG	39600
AATTGTCTCC	CTAGAAACGG	TTTGTACCAA	ACAATACACT	GACTTTACAC	AAAATCAGAT	39660
CTGATTGGCA	ACAGTTGCAG	ATGTTTTCAA	AGGATTTTCA	TTTGAGAAGG	GGCCCATTTG	39720
GGTTATTTAG	ATTCTAAGAA	CTGAAACTGC	TTTGTTCTGT	TTTTCTGGCT	TCTGGGAGAG	39780
GAGGAGACAT	GAATTCAGTT	AGCACCTTGG	TATTTTCTTT	ATCCTTCATT	TCAATACAGA	39840
AGATGCTTCA	TATGCACAGT	GGTGTCAGGT	CACATCAAAA	GAAAGAGAAA	CAGTTTCTTG	39900
GTTTTTAATT	TTCAACCGGA	AAGGAAAGGC	ACCCATTTTG	TTCCGCTCTA	ATTAGCCAGT	39960
GCATGACTTA	GAGAGCAGGC	AGATGCTTTG	AAGGCGTGGT	AACACAGGTC	TTCATTAATC	40020
TCCACGCAGG	ACTTGCACTT	CTACTATGCC	TAGGCTGAAG	AAAATGGCTC	AGGAAGATGA	40080
ACAATCTCAC	AGAGCCCTAA	CTAACTGAAG	CCAGGTGTTA	TAAAGCACAA	GTCAAGAGGG	40140
TGAGAAACTA	ACGTTCTTGA	AATCTCCCAC	TTCTTTCTAC	GTCAGAAGAG	CCAAGCTGAT	40200
TATTTTAGTT	GGAATTTAGA	AATTTTTAAA	AATTATTCTA	AAGTCATGAA	CAAGCCTAAT	40260
TATAAAGATA	GTTGCTGTGA	AGGTGCTGAA	ATAACTCGAT	TTTACCAACC	CCCTCTTCTG	40320
GAGGAAGCCA	GAATGGAATC	CTGTAGAATG	TTCACTCTAC	CAACGAACTC	TTGTTTTTCT	40380
AATGAGGAAA	CAGAGGCCCA	CAGTAGTAAA	CTATCTTAAC	CAAGACAAAA	TGACTAGTGC	40440
TCTGGTCCTT	TTATTAAGCA	СТААААТТТТ	GATCCAATAA	TAAATCTGTC	CAGTAGAAGG	40500
AGTTTCCCTA	ATGTACTGGT	TCTAACTTGT	TCCCTTCAAG	GGGCCAGTGT	CCCGTACACA	40560
TAGCTAAATG	GGACTTCTCT	TCAACTACCA	TTACCCAGAG	GGCAGAACCT	AAAATGCTGT	40620
GAATGACATT	CTGCTGTTCA	CATCTCAGCA	GCAGTGTTGC	ATTTGAGCTT	CTGCAGGGCC	40680
ACCCAGGACC	TATATCTGCT	CAGATGTTTA	АСТСАТСТАА	TTCAGTGAAC	ACTTCATTCT	40740
AGTTAACTGA	ACATCTACTT	TGTACAAGGC	ACTACAGCGG	TTCAGAGATG	AATAAAATCA	40800
TGAGATTCCA	СТСТСТССТА	TAAACCATCA	CTTTGGGAAA	TTTTAGAAAT	GTGGGTAAGC	40860
		SURS	TITUTE SHEET	(Rule 26)		

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TCCAGGGCTT CCTGCAGCGT AGAAGTCACA AACTCAAATG CCTGCAGAGG CCCAGCTGAC 40920

AACATAAGTA AATGATTCTG GCTGGGCGGA AAACAATTAC GGGTGGGTGG GTTTCCAGCT 40980

GGGGAGTGCA CGCCTGTGTT AAAGGACA 41008

(2) INFORMATION FOR SEQ ID NO:4b:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 39238 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4b:

GCTGCTACTC ATTTCCAGCC AACTGTGTTC CCATGTAGAA CTGCGGCCCA GTGTAGCCAG 60 TACCGAAGAT TTCTCAGAAA AAGCCGGAGA TCTCAATGTT AGTGTAAAAT CTCTCAAATT 120 TCCAAGAGGA TTATATGGGG CAAAGGTTCT CAGATCAGTT TGCAGTCTCT TACTTAGCCC 180 ATGTGCAGAG CAGTCGTAGA GGGTAGCATG CAGTGTCCTA CATAATAATT CTTTTTTATT 240 TTATTTATG CCTTCCTCT TCCTGTCTCT CTTTAACCTT TCTTCTTCCC TCAGGCTGGC 300 TTCTTCCCTC AGCCTCGTCC GACCCCAGCC TGGGTTCAAT GAACATTCGG TAAAGGAACA 360 CGGAATGTCA AGCGCATTAG AGACAACCTT GAGACACATT CCTCTTGCGG TAAGCACTTC 420 ACTGTAGATT TTTAATTTTA AACAAGACAA TGTTTACGAC TTGCTTCTTT CAGGGAAGAG 480 CGATATCAAT TTTAGTGAAC ACTTCAAGGC TGAGATACGC TAGGAGAGTC GTGTGGTGTT 540 GCACAGCAAA GAATTCCACT TTGAAGCGAG TGGGAAAAAA AGCATCAAAT GCCACATGTA 600 ACTCACCGCC TGAAGGGTTA CATTGGTATG AAACCTGGGT TTAAAAAGGG ACCGAATAGA 660 CTAGCCATTA AAAGACCTGC GTACAACCTC TCTCTCTCTC TTTGAGAGAT AATGTATCTG 720 GACAATAAAC ATGAACAGAG TGGAGTCTAT CCTGTTTAAA ACATTGCCTA CTGTACAGGC 780

ACCAGGAGCT	GAAGGGTCAG	AATATTAGCA	GTGGGAGCTT	GATTAGAAGT	TGATGAGAGA	840		
TGGGTAGTAG	GAGGAAAGAG	TGAGATAGAG	GAAGAGGACA	TGGGGGTTAC	CCGTAAGTGG	900		
AGAGTAGAAA	AGTAGAATCA	GCTGGCCATC	AAAGGGCGTG	GGACTGAGGA	ACAGTATGGC	960		
ATGTATTAAA	TATACTAAGC	GCTGACATTG	GAGGAGAACT	AGGAAGGTAA	ATGAAATCAA	1020		
TAGGGGATGA	TGGAGAATAG	TTAGGTGTGC	AGGGATTAGG	GTTATGATAG	AAATACATGT	1080		
GAATACATGC	AGTATTGTCC	TGGAAAATGG	TTAACAGTTG	GTTCTCCTGG	GGGGTGAGGG	1140		
GAAGCCCTGA	TTTGTAATAT	TTGCCTATTT	CTGTGGTGCA	AATACTCCCA	CCATGACCAG	1200		
TTTCAAGCTA	TGAATGTGAA	TCACAAAAGC	AGGTTGGGAG	GAGATGCGCA	CATTTGTTCC	1260		
CCGGCAAGGT	GGAAGGTAAG	GAAGGTGAAA	TCAACAAGGT	CAAAGAAAAC	TCAAGATTTC	1320		
GAGGTGCCTC	AGGTCTGAGG	GGCAATGAAG	TCTAGGAATG	GCTGTGCTGA	GGTAGCTGAA	1380		
ATAGAAGTGA	CTGCAGAGGT	CATGAAGCTG	AAGAGGTGAA	AACAGAAATT	AGAAAGGCAA	1440		
ACCCCCACCG	CCCAACCCCC	ACCCCTGCAG	CCAGTTTCTG	AGGGTGACAA	TAGAGGAAAG	1500		
GGTGGAGATG	GAGTTCAGGT	CCAGAAGCCA	TAGAAGCGAG	TGTGACATTG	TGCTCAAGGT	1560		
CAGCACATGT	CAGTGTGGGG	TGTCACATGC	TGTTGTGAAC	CATCATTTAT	CACCAATTAT	1620		
GGAAGACCTC	CTATGGGCAT	CTTGCCATAT	GCATTATAAA	GATGTGTAAG	AAGACATTTC	1680		
CCTCCACTTG	GTGAGGAGAA	TTAGGGCTGT	ACACAGATAC	TGTAGAGTGC	CATGTGCCTG	1740		
GTACAGATAA	GGTGTGTTAG	AGGTTAAAAG	ATGAGGCTCT	ТААТАТТААТ	GATAGATCCC	1800		
ACTTACCTGA	GTCTGACTTA	CAATGTGCCT	AGCATTAAGT	GTTTTACCTG	CATTCCCTTT	1860		
GACCTTCAGA	ACAACCCATT	TTACAGATAG	GGAAATTGGG	TCAGAAAGTT	TCAGTAACTT	1920		
ATCCAAGGTC	ACACAATTGG	CAAGTGCCAG	AGCTGAGCCA	GGAACTGAGG	TCCTTCTAAC	1980		
ACCAAACAGC	TTGTCTCCCC	AATCACTGTG	CTATTTTCCC	TCCCCCAGAA	GATAATACTC	2040		
TGATGGAAAT	GAAGGATAGT	GTAATAGGAG	ATTCGGTGTT	CCTTTTTTTA	AAAAAAATTC	2100		
AGCTTGCATA	TTCCTAAAGA	GTCAATTCAT	GTTTAAAAAA	AATTTCCCTT	GTGCTTGCAT	2160		
SUBSTITUTE SHEET (Rule 26)								

GTGACATGTA	TTTTTAGGAT	CTGCTGTTAG	CAAGTGTATT	TTTGTGTGAT	TGAGTGGGAG	2220		
AGTGGGAAAA	GTTTTGCAGA	GCTGTTGAAG	CCAGAATGCA	GGGGGGCTGC	GCAGCAGAGA	2280		
CTGTAAAATC	TCTGCCATCT	CAGGTCTTGG	AACAAGCACA	AAGAGATGTG	TTCTCGATTT	2340		
АТТАТТСТАТ	GTACATCCCC	AGATGAATGA	CTAGTTAAAG	GTATTGTTAA	AGCATTTTAA	2400		
ATGACCCACT	TCCAGCAGCG	AACAAAATCA	CTTGCTGTGC	CAAGCCAACT	GGCATTTCTG	2460		
AGATGATAAA	ACCACAAAGT	GAGGAAAACG	TTAAAACTGC	TAAAGCAAAA	ATGATACACA	2520		
ATAATGGAGA	AGGAGAAAA	TTGAGCTTTA	TTGTCTGCCT	AGGCAGATGG	CTGACCACTA	2580		
GGTGGGCTCG	GCGTCACGTC	CAGGGTAATT	GGTTGCTGGG	GTGTTTCTGG	CGAGGAAGAT	2640		
TCACGCTTCA	GCTCGGTCCA	CAAGATCCTG	GCTCATTCTT	TCCTAGATTC	CATTTTCTGC	2700		
CTCCTCTCCA	TGACTGGGTC	TGATGGTTGA	TCCAAACGGG	CAATTGAAAT	CAGAAGGTTA	2760		
CCTTTACCTT	AAAATGCTTT	TCTGGAAATA	AAAGGACATG	AAAAGTAACT	AAGGACCGGA	2820		
TTTCCTAGCC	GTCTTTCTCT	CCTGCATGCG	CAATTTATCC	CCAGATATAA	AATTGCCTGC	2880		
TTTGATAATT	ATACCCTCTA	AATGAGGGC	AAGTGGCTAA	TTATGCCCAC	ATGTGGCCGA	2940		
TTGCACTCCC	CATTAGCCAA	TTATGTGCTC	AATTATTTGT	GCACATGAAT	AATTGCACTC	3000		
ATGGAAAATA	GCGGCCCTCC	TTTCAAATCC	TCGTGCTTGG	AGTGGCTGAT	GGAGTAATTG	3060		
TCACACTGGA	AATGCACTTG	GTGGGGAGGG	AAAGAGTATC	AGATACCAGG	AAACGCATAA	3120		
GTGACCAGAG	CTCGCAGATG	TTCACTGCCA	CAAATGGCCT	TAGGAGCCAG	AGAGAGCGGG	3180		
AAGGACCACA	GGATGGAACG	GGCCAGCCTG	TGAGTTAGGA	AGCCTGCTTC	TGAAGTTGCC	3240		
TGGGCAGCTC	ATGTGCGGTG	ACCTTGGGCA	AGTCATTAAC	TTTCCTTCAG	GTCTAACTGG	3300		
TTCTGCATAC	ACAATGAGGA	TGGTAATAAC	GCCCAATTCC	CATCACTATC	GTGGGATGGA	3360		
TCAGACTATT	TAAAAGGATT	TACAATCTGC	TTGGGTAAAA	GCTTTACATA	AATATGAGGC	3420		
ATTATCATGT	CGCTTGGTAC	ATCTCCAATT	ATGAAGGAAG	GGTAATGACC	CTCCACAGCA	3480		
ATGCAGGACT	CCTGGTTTGG	AGGGAGGGAA	AGTTTGAGAA	GGACAGGAAG	CTTGTTGCCC	3540		
SUBSTITUTE SHEET (Rule 26)								

CAGCACTGAT	GTTTCTACTG	AGGTACCAGA	AAATGTCATG	TGGTCATACA	GAATTCATTT	3600
ATTCATTCAA	CAAACATCTG	TCAATTGTTA	CACTGTCCTG	AGAATTTGGA	AAAATGATGA	3660
AAGACTCAGT	CCTGCCTTAG	GAGGTCACTG	GCACATTGGC	CCGGGCCCCT	GTTTTGGGCC	3720
TTTTACTCTG	ACCTGTGCTG	ATTTGCAAAT	AGTGGGAAAT	TTTATCTCAA	GTCTAGGAAA	3780
TCTGGCATGC	ATTTTCACGG	TTTGATTGCC	AGGTACATTC	GATGGCAATG	AGTCTTATAA	3840
TGTTTGGTTA	CCTTCATTTA	ССТАААААСТ	GTGGTTGTTG	CTGTGGTTGT	TGTTTTTGTT	3900
GTTTTTGAGA	CGGAGTCTTG	CTCTGTCATC	CAGGCTGGAG	TGCAGTGGCA	TGATCTCCGG	3960
TCACTGCAAA	CTCCACCTCC	CAGGTTCAAG	CGATTCTCAT	GCCTCAGCCC	CCTCAGTAGC	4020
TGGATTACAG	GCGCGCACCA	CCATGCCCGG	CTAATTTTTG	TATTTTTAGT	GGAGACAGAG	4080
TTTCACCATG	TTTGGCCAGG	CTGGTCTCGA	ACTCCTGATC	TCTGGTGATC	CGCCTGCCTC	4140
GGCCTCCCAA	AGTGCTGTGA	TTACAGGCGT	GAGCCACTGT	GCCCAGCCAG	AACTGTGGTT	4200
TTAATGACAA	TGCTAAAAAG	TGGTATATGT	CACAGTGTCG	GGTGGGGCTA	AGAGGCACAT	4260
TGCTGCAGTG	ATCCATCATT	CATTTCCCAC	CATTCTCGCC	TGGATTAGCG	CAGCAGCTCC	4320
CAGAGAGGCA	CCTCACTTTG	ACCTTCTTCC	TCAAAGACAT	TCTCTGTGAC	CTGCCTGGCC	4380
CTTATTACCT	CTCTAGCTTT	GCCACTTCCC	TATGTCTCCA	TCTCCCCTCT	CACACGTAGT	4440
AAGAAAGAGA	CTCTACCTCC	ATGGAAGTTA	AGGAGAGGTT	TCACAGAGGC	AGGATTGCTT	4500
ATTAGTCTTC	AAAGATGAGG	TATTTGCTAA	ATGAATGAGA	CAAAGGGATT	GGGGCCACAT	4560
TACAGGAAAT	TGAGGTATGT	AATAGCCTGG	TGCAGGTTAA	GAGTGTGGAC	TCTGAAACCA	4620
GACTCAGCCT	GGAATTGAAT	CCTGGCTGTG	TGATGTTGGG	CCAGTGACTT	AACCTCTCTG	4680
TGCTTTTATT	CACTCTTCTA	TAAAATGGGG	АТТАТААТАА	ACCTACCTTA	TAAGGTTATT	4740
ATAAGAGTCA	GTAAATATAA	AAATAGAAGT	TTTTGGATGA	TGACTAGCAC	AGAGTAAACA	4800
CTTGTTTGCC	ATTATTTTA	TTACTTGACT	AAAAATATAC	CAAAAAGACC	ATCCAAGAAA	4860
AGCCTTTAAG	CTGCTAGTGC	AGAAAGATTC	CCCTTGTGTT	TGTGTGCTGG	GGGGTCAGTG	4920

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TGTCTAAAAT CATCACATGG ACAACTTATT AAGGAAAGCA AATGCCTGGG CTCCATCCTC 5	040
AGAGAGTCTC ATTCACTGGG TCAGGATAGA GCCCAGGAAT CTTTACCTTA AAGAACCATC 5	100
CCACCTCCCA CCTCATATGA TCCTTATGCA GGTGATCTGG GGGCCCACAC TTTGAGAAAT 5	160
AGACTCAGGT CAAAGTGGGC TCTAACTGCA TCTCATTTCT TACCTGGCAT ATCTAATAGT 5	220
AGAGAAGAAG ACAATGCTAA GATTTTTGTT GGAGATCTTT TGCTGGGATT GCTGCTTCAT 5	280
TCATTCACTC ATTTATTTAT TTATTTATTT ATTTTGAAAC AGAGTCTCAC TTTGTCACCC 5	340
AGGCTGGAGG GCAGTGGCAC AATCTGAGCT CACTGCAGCC TCAGGCTCCT GGGTTCAATC 5	400
GATTCTCTTG CCTCAGCCTC CCGAGTAGCT GGGATTACAG TCATGCACCA CCACGCCCAA 5	460
CTAATTCTTG TATTTTTAGT AGTGACAGCG TTTCACCATG TTAGCTAGAC TGGTCTCGAA 5	520
CTCCTGACAT CAGGTAATCT GCCTGCCTCG GCCTCTCAAA ATTAGTAGCT GCAATTACAC 5	580
GTGTGAGCTG CCGTGCCTGG CCTGCTGTTT CTTTTAGTTG GGCCTCTTCT GTAATAGAGT 5	640
GTGAGAATTC TGACTTGCTG CAACAGTCTG CTTTGAAGCA GGGCTGTGTT TACACTGGTC 5	700
AGATGTGGAA TTGTGGGGCA CACTTAGCAG CTTCCTTCTC TAATTTTTCT GTATTTTCAG 5	760
GAGAACAATT TTAAAAAAATT TAATAAAAAAT GCCTTAAAAA TTAACATTAT TATAAGATGA 5	820
ATCCCATTTT TCTAATCTTG TAAATTAAAA ACAATCATAA GCATATGAGC ACCTGCACTT 5	880
AGGGAATCAA GGTGGCAAAG CTAAACACTT CCAGCTCTAG GTGATTCGCG GCAATACAAA 5	940
TGGAGCTGGA CTTTGGCCAC AGTGCAAAAA TATTGATCTG TTGTTAGATG CTCTGAAGTT 6	000
TCCACAAAGA ATTGGTTCTG CCTGCTGTGC TTCAGTGCTT AAGGGAAGTG GTTCCTCAAA 6	060
ATGTTAGTTT TTAAGCCCAG CTTTCTTAAA TAGGAAGATT CTAATAGTAG CAAAAATATA 6	120
AACTGCTTCT AGGTTTAAAA AGGACCAGCA CACAATGGTT ATCACACAC TTTCTCCTCA 6	180
GGTGATGAGT GGATGAGTGG CCTGGTGTAT TTCATAACAT CTCCCAGGGT CCAAATGCTA 6	240
AAGCAATTGC TGAAAAGATA CCATGTGTAC CGGAACCTTG CAGAGGTATT TTGTTGGCAT 6	300

AAAAAGAAAT	ATTGATCATC	TATAGTAAAA	ATGGTTCTAC	ТТТААТАСТА	CTGAGAAAAG	6360			
ATTTTCTTTT	CCCAGATCTA	CATCCTGAAT	CTTCATGAAG	ACAAGATCCC	CTAAACTTCC	6420			
ACTAACACCA	TAATGTGTGC	TGTCCTTTGT	AATGTAGTCC	ACAGATCTCA	TAAACTGTCA	6480			
GAAATAGCAG	AGATTGTAAG	GTCATCCACT	TCCCCTGTAA	GGCCTGCGTC	CCTCACTTAC	6540			
ATCCCTAATA	ACGTCCTCTA	ACCTCTGCTG	GAGGGCAGAT	TTAGCTGCCA	GCTGGGAAGA	6600			
GCTCTGCCCT	AGTCAACATT	TTTATCTGTG	GCTTTCAGAT	GAGAACACTG	GATGCTTATC	6660			
TGAAAAAAGC	TCCTCAGGCT	GGAGGGAGGG	ATTGGCTCTA	ACAAGATGCA	ATGTGATAAG	6720			
AATAAAAGCG	AAGCCAAACT	CTAGGCCCAA	AGGCTCTAGC	AACACACTTT	TGAGAACCTT	6780			
GGAGACGAGT	TTTGGCTGAT	GCGAGCTTCT	CCGCCTGCTA	AAGTAGCCCA	TTCCATTTGG	6840			
ACGGCTCTAG	AGGCTGGCAT	GTTCTTCTCC	ACGTTGTGTT	AATGTACTCC	AGTTTCTTCC	6900			
TGCCATGAAC	TGGCATGCCC	TGGCTCCTCC	TACCTTCCCC	ACTTTAAGTC	TTCCCTCCCT	6960			
CCTTCTGACC	TTCCCATTCC	AGCCACACTG	GCCTTTTGTC	TGGTCCTAAC	AAACCATGCC	7020			
TTTCCTGCCT	CCAAGCCCTA	CACCTGCTAT	CCATCCCTCT	GTCTGAGAGA	CACTCCCACC	7080			
CCTTCACAAA	GCCTGTTTCT	CATCCTTCCA	GTTCAGATGT	CTTCTCAGCT	TGCCTCAACT	7140			
GACCTCTTTC	AGCTATTCTC	ACTCTTTGTA	CTCTGTTCAT	TTCCTTCCTG	GCAGTCACCA	7200			
ТААТТТАТСТ	TTATTTGAAT	CAATTTCTTA	GTTGTATTAT	TTAGTTATTT	GCACACTCTG	7260			
TCTCTCTGTG	CCTTTCTTAT	TCACTGCAGG	CTTTCTTATG	TAAGTAATTT	ATTTACTTAA	7320			
ATTTTTAAAA	ATAATTTCAA	CTTTTGGCCG	GGCACAGTGG	CTCACGCCTG	TAATCCCAGC	7380			
ACTTTGGGAG	GCCGAGGTGG	GTAGATCAGC	TGAGGTCAGG	AGTTCGAGAC	CAGCCTGGCC	7440			
AACATGGTGA	AATCCCATCT	CTATTTAAAA	TACAAAAACT	AGCCGGGCGT	GGTGGTATGC	7500			
ACCTGTAATC	CCAGCTACTC	GGGAGGTTGA	GGGAGGAGAA	TCACTTGAAC	CGGGGAGGTG	7560			
GAGGTTGCAG	TGAGCTGAGA	TCACGCCATT	GCACTCCAGC	CTGGGGCACG	AGAGTGAGAC	7620			
ТТСАТСТСАА	АААААСАААА	AACAAAAAAC	CCCTGCTTTT	CAGAGGGGCT	GAACTAATTT	7680			
SUBSTITUTE SHEET (Rule 26)									

ACATTCTCAC CAATAGTGTA TAAGCATTCC CCTTTCTCTA CAGCCTCACT AGCATTTACT 7740 TTTTTAAAAA ACTTTTTAAT AATAGCCATT CTGACTGGTA TGAGATGGTA TCTCCTTGTG 7800 GTTTTCACTT GCAATTCTCT GATGATTAGT GATATTGAGC ATTGTTTTAT GTTTGTTGGC 7860 TGTTCGTATG TCTTCTTTG AGAAGTGTCT TTTCATATAT TCTGCCCATT TTTTGAATGG 7920 AGTTGTTTTG TGCTTGTTGA ATTAAGTTCC TTATAGATTC TAGATATTAG ACTTTTGTTG 7980 GATGCATAGT TTGTGAATAT TTTCTCCCAT CCTATAGTTC TGTTTACTCT GTTGATAGTT 8040 CCTGTTTTGT TATGTTTTGT TTTTTTGCTG TACAGAAGCT GTTTAATCTA ATTGGTCCCA 8100 CTTGTCAATT TTTGTTTTTG TTGCAATGGC TTTTGAATTT TAATAATAAA TTCTTTCCTA 8160 AGGCTGATGC CCAGAACAGC ATTTTCTAGG TTTTCTTCTA GGATTCTTAT AGTTCAAAGT 8220 CTTATATTTA AGCTTTTAAT CCACCTCAAG TTAATTTTTA TATATAGTGA AATGCAGGGG 8280 TCCTGTTTCA TTCTTTTGCA TGTGGCCAGC CAGCAATCCC AGAACCATTT ATTGAATAAG 8340 GAATCTTTTC CTCATTGCTT ATTTTGTCAA CTTTGTCAAA GATCGGATGA CTGTAGGAGT 8400 GTGGCTTTTT CTGGGTTATC TACTCTGTTA CATTGGTCTA TGTGTCTGTT TTTGTATCAG 8460 TATCATGCTG TTTTTGTTAC TATGGTCTCA TAACATAGTT TAAAGTTGGA TAATGTTATG 8520 CCTCTGCTTT GCTGTTTTTG CTTAAGATTG CTTTGGCTAT TGAGGCTCTT TTTTCACTTC 8580 ATATGAATTT TAGAATAGTT TTTTCTAATT CTTTGAAAAA TGACCTTGGC AGTTTGATAG 8640 GAATAGCATT GAATCTATAG ATTGCTTTGG GCAGTATGCT ATTTTAATGA TATTGATTCT 8700 TCCTATCCAT GAGCATGGAA TATTTTTCCA TTTGTTTGTG TCATCTACTA TTTCCTTTAG 8760 CAATGTTTTT TAGTTTTCCT TGTAGAGATC CTCCTAGGTA TTTCATTTTT TATGTGACTA 8820 TTTTAAATGG GATTGCATTC TTCATGTGGC TCTCAGCTTG AATGTTATTG GTGTATAGAA 8880 ATGCTACAGA GTTTTGTACA CTGATTCTGT ATCCTGAAAC CTTACTGAAG TCATTTATCA 8940 GTTCTAGGAG CCTTTGGCAA AGTCTGTAGT GTTTTCTAGG TATAGAATCA TATCATTAGC 9000 AAAGAAAGAT AGTTTGACTT CTTCTTTTCC TATTTGAATG CCTTTTATTT CTTTCCCTTG 9060

GTTCCACCTC TCAAGGGAAA TGGTTCCAGC TTTTGCCCAT TCAATATGAT GTTGGCCATG GGTTTGTCAC AGATGGCTCT TATTATTTTG AGGTGTATTC CTTTGATGCC TAGTTTGTCA AAGGCCTTTA TCATGAAGGG ATGTTGGATT TTATTGAAAG CTTTTTCTGG GTCTTATTTG 9300 GTGAATTGCA TTTATTGAAT TGTGCATGTT GAGCCAAACT TCCATCCCAG GGATTAAACC 9360 TACTTAATCA TGGTGTTAAC TTTTTGATGT GCTGCTGGAT TTGGTTTGCT AATTTTTTTT 9420 TTTTTTTTAA AATGGATTCT CCCTCTGTCC CCCAGGCTGG ATTGCAGTGG TGTGATCTTG 9480 GCTCACTGCA AGCTCCACCT CCCGATTCA TGCCATTCTC CTGCCTCAGC CTCCCGATTA 9540 GCTGGGACTA CAGGCACCCG CTACCATACC CAGCTAATTT TTGTATTTTT TAGTAAAAAC 9600 AAGGATTTCAC CATGTTAGCC AGGATGGTCT TGATCTCCTG ACCTCGCAT CTGCCTGCCT 9660 CAGCCTCCCA AAGTGGCTAG TATTTTTTA ATTACTATTT TTTCTCACCC TTGCCTGCCT 9780 CCTGTAATTT TCTAGTATTT TGTTGAAGAT TTTTGCATCT ATTTTCATCA GGGATATTGG 9780 CCTGTAATTT TCTAGTATTT TGTTGAAGAT TTTTGCATCT ATTTTCATCA GGGATATTGG 9900 CAGCTCTTTG TGTGTCTGGG AGAAGTTGTA TGCCATAAAT TTAAATGCAG TTAATATTTA 9960 CAGCCTCTTTG TGTGTCTGGG AGAAGTTGTA TGCCAATAAT TTAAATGCAG TTAATATTTA 9960 CTGGACAATT TCCTCCAGAT AATTGTATAT GATTTTTTGGT CCACCCTGAG TTGATACATG 10020 TATTTTAATT GTATCATGGT ATGAAAAGAG CAAGAGTATT TGGTCACCTA GTCTTGCCTA 10080 TAGATGTGCC TAATGATCA AAGTAGATAT TTTGGGAGCC TAACAGGTC CGTGACTAGG 10140 CAGTTTTGTT TTTTTTTTT TTTTGAGACAG AGGTGTTT TGGTCACCTA GTCTTGCCTA 10020 AGTGGCATGA TCTCGGCTCA CTGCAACATC CGCCTCTGG GTTCAAGCAA TTATACTGCC 10260 TCAGCCTCCC CAGTAGCTG GACTACAGGC TCACCGCCAC AGGCTGGCT AATTTTTGTA 10380 TCAGCCTCCC CAGTAGCTG GACTACAGGC TCACCGCCAC AGGCTGGCT AATTTTTTGTA 10380 TCAGCCTCCC CAGTAGCTG GACTACAGGC TCACCGCCAC AGGCTGGCC ACCGCACCCG 10440	TCTGATTGCT	CTTCCAGTAC	TACGTTGAAT	AGGAGTGCTG	AGAGTGAGCA	TCCTTGTCTT	9120
AAGGCCTTTA TCATGAAGGG ATGTTGGATT TTATTGAAAG CTTTTTCTGG GTCTTATTTG 9300 GTGAATTGCA TTTATTGAAT TGTGCATGTT GAGCCAAACT TCCATCCCAG GGATTAAACC 9360 TACTTAATCA TGGTGTTAAC TTTTTGATGT GCTGCTGGAT TTGGTTTGCT AATTTTTTTT 9420 TTTTTTTTAA AATGGATTCT CCCTCTGTCC CCCAGGCTGG ATTGCAGTGG TGTGATCTTG 9480 GCTCACTGCA AGCTCCACCT CCCGATTCA TGCCATTCT CTGCCTCAGC CTCCCGATTA 9540 GCTGGGACTA CAGGCACCCG CTACCATACC CAGCTAATTT TTGTATTTTT TAGTAAAAAC 9600 AGGATTTCAC CATGTTAGCC AGGATGGTCT TGATCTCCTG ACCTCGTGAT CTGCCTGCCT 9660 CAGCCTCCCA AAGTGGCTAG TATTTTTTTA ATTACTATTT TTTCTCACCC TTGCTGCCT 9720 CTTATGATTT TCTAGTATTT TGTTGAAGAT TTTTGCATCT ATTTTCATCA GGGATATTGG 9780 CCTGTAATTT TCTTTTTCA TTTCATCTTT ACCACATTTT TGTATCAGGT TCATACTGGC 9840 TTCATAGAAT GAGTTCAGGA AGGACCTCC CTCCTCGAAT TTTCATCAG AATTAGTACC 9900 CAGCTCTTTG TGTGTCTGGG AGAAGTTGTA TGCCAATAAT TTAAATGCAG TTAATATTTA 9960 CTGGACAATT TCCTCCAGAT AATTGTATAT GATTTTTGGT CCACCCTGAG TTGATACATG 10020 TATTTTAATT GTATCATGGT ATGAAAAGAG CAAGAGTATT TGGTCACCTA GTCTTGCCTA 10080 TAGATGTGCC TAATGATTCA AAGTAGATAT TTTGGGAGCC TAACAGGTGC CGTGACTAGG 10140 CAGTTTTGT TTTTTTTTT TTTGAGACAG AGTCTCGTTA TGCTGCCCAG GCTGAGTGC 10260 AGTGGCATGA TCTCGGCTCA CTGCAACATC CGCCTCCTGG GTTCAAGCAA TTATACTGCC 10260 TCAGCCCTCC CAGTAGCTGG GACTACAGGC TCACCCCAC ACGCCTGAC AATTTTTTGTA 10320 TCTTTTAGTAG AGATGGGGTT TCACCATATT GGCCAGGCCC ACCGCTGGC AATTTTTTTTT TTTTTTAGTAG AGATGGGGTT TCACCATATT GGCCAGGCCG GCTGGACCCC 10380 TCTTTTTAGTAG AGATGGGGTT TCACCATATT GGCCAGGCCC ACCGCTGCC ACCGCCCCCA TCAGCCCCCC CAGTAGCTGG GACTACAGGC TCACGCCCCC ACCGCCTCCA ACCGCCCCC ACCCCCCCC	GTTCCACCTC	TCAAGGGAAA	TGGTTCCAGC	TTTTGCCCAT	TCAATATGAT	GTTGGCCATG	9180
GTGAATTGCA TTTATTGAAT TGTGCATGTT GAGCCAAACT TCCATCCCAG GGATTAAACC 9360 TACTTAATCA TGGTGTTAAC TTTTTGATGT GCTGCTGGAT TTGGTTTGCT AATTTTTTTT 9420 TTTTTTTTAA AATGGATTCT CCCTCTGTCC CCCAGGCTGG ATTGCAGTGG TGTGATCTTG 9480 GCTCACTGCA AGCTCCACCT CCCGATTCA TGCCATTCT CTGCCTCAGC CTCCCGATTA 9540 GCTGGGACTA CAGGCACCCG CTACCATACC CAGCTAATTT TTGTATTTTT TAGTAAAAAC 9600 AGGATTTCAC CATGTTAGCC AGGATGGTCT TGATCCTCT ACCTCGTGAT CTGCCTGCCT 9660 CAGCCTCCCA AAGTGGCTAG TATTTTTTTA ATTACTATTT TTTCTCACCC TTGCTGCCT 9720 CTTATGATTT TCTAGTATTT TGTTGAAGAT TTTTGCATCT ATTTTCATCA GGGATATTGG 9780 CCTGTAATTT TCTTTTTCA TTTCATCTTT ACCACATTTT TGTATCAGGT TCATACTGGC 9840 TTCATAGAAT GAGTTCAGGA ATGGTCCCTC CTCCTCGAAT TTTCTCTGTA GAATTAGTAC 9900 CAGCTCTTG TGTGTCTGGG AGAAGTTGTA TGCCAATAAT TTAAATGCAG TTAATATTTA 9960 CTGGACAATT TCCTCCAGAT AATTGTATAT GATTTTTGGT CCACCCTGAG TTGATACATG 10020 TATTTTAATT GTATCATGGT ATGAAAAGAG CAAGAGTATT TGGTCACCTA GTCTTGCCTA 10080 TAGATGTGCC TAATGATTCA AAGTAGATAT TTTGGGAGCC TAACAGGTGC CGTGACTAGG 10140 CAGTTTTGTT TTTTTTTTT TTTGAGACAG AGTCTCGTTA TGCTCCCCAG GCTGGAGTGC 10200 AGTGGCATGA TCTCGGCTCA CTGCAACATC CGCCTCCTG GTTCAAGCAA TTATACTGCC 10260 TCAGCCTCCC CAGTAGCTGG GACTACAGGC TCACCGCACC ACGCCTGGCT AATTTTTGTA 10320 TTTTTAGTAG AGATGGGGTT TCACCATATT GGCCAGGCCT GTGTTGAACT CCTGGCCTCA 10380 TGATCCACCC GCCTCGGCCT CCCAATGTGC TGGGCCTTACA GCGCTGAGCC ACCGCACCCG 10440	GGTTTGTCAC	AGATGGCTCT	TATTATTTTG	AGGTGTATTC	CTTTGATGCC	TAGTTTGTCA	9240
TACTTAATCA TGGTGTTAAC TTTTTGATGT GCTGCTGGAT TTGGTTTGCT AATTTTTTTT 9420 TTTTTTTTAA AATGGATTCT CCCTCTGTCC CCCAGGCTGG ATTGCAGTGG TGTGATCTTG 9480 GCTCACTGCA AGCTCCACCT CCCGATTCA TGCCATTCTC CTGCCTCAGC CTCCCGATTA 9540 GCTGGGACTA CAGGCACCCG CTACCATACC CAGCTAATTT TTGTATTTTT TAGTAAAAAC 9600 AGGATTTCAC CATGTTAGCC AGGATGGTCT TGATCTCCTG ACCTCGTGAT CTGCCTGCCT 9660 CAGCCTCCCA AAGTGGCTAG TATTTTTTA ATTACTATTT TTTCTCACCC TTGCTGCCAT 9720 CTTATGATTT TCTAGTATTT TGTTGAAGAT TTTTGCATCT ATTTTCATCA GGGATATTGG 9780 CCTGTAATTT TCTTTTTCA TTTCATCTTT ACCACATTTT TGTATCAGGT TCATACTGGC 9840 TTCATAGAAT GAGTTCAGGA ATGGTCCCTC CTCCTCGAAT TTTCTCTGTA GAATTAGTAC 9900 CAGCTCTTTG TGTGTCTGGG AGAAGTTGTA TGCCAATAAT TTAAATGCAG TTAATATTTA 9960 CTGGACAATT TCCTCCAGAT AATTGTATAT GATTTTTGGT CCACCCTGAG TTGATACATG 10020 TATTTTAATT GTATCATGGT ATGAAAAGAG CAAGAGTATT TGGTCACCTA GTCTTGCCTA 10080 TAGATGTGCC TAATGATTCA AAGTAGATAT TTTGGGAGCC TAACAGGTGC CGTGACTAGG 10140 CAGTTTTGTT TTTTTTTTT TTTGAGACAG AGTCTCGTTA TGCTGCCAG GCTGGAGTGC 10200 AGTGGCATGA TCTCGGCTCA CTGCAACATC CGCCTCCTGG GTTCAAGCAA TTATACTGCC 10260 TCAGCCTCCC CAGTAGCTGG GACTACAGGC TCACGCCACC ACGCCTGGCT AATTTTTGTA 10320 TTTTTAGTAG AGATGGGGTT TCACCATATT GGCCAGCCCC ACGCCTGGCT AATTTTTGTA 10320 TTTTTTAGTAG AGATGGGGTT TCACCATATT GGCCAGCCCC ACGCCTGACCCC 10340	AAGGCCTTTA	TCATGAAGGG	ATGTTGGATT	TTATTGAAAG	CTTTTTCTGG	GTCTTATTTG	9300
TTTTTTTTAA AATGGATTCT CCCTCTGTCC CCCAGGCTGG ATTGCAGTGG TGTGATCTTG 9480 GCTCACTGCA AGCTCCACCT CCCGATTTCA TGCCATTCT CTGCCTCAGC CTCCCGATTA 9540 GCTGGGACTA CAGGCACCCG CTACCATACC CAGCTAATTT TTGTATTTTT TAGTAAAAAC 9600 AGGATTTCAC CATGTTAGCC AGGATGGTCT TGATCTCCTG ACCTCGTGAT CTGCCTGCCT 9660 CAGCCTCCCA AAGTGGCTAG TATTTTTTA ATTACTATTT TTTCTCACCC TTGCTGCCAT 9720 CTTATGATTT TCTAGTATTT TGTTGAAGAT TTTTGCATCT ATTTTCATCA GGGATATTGG 9780 CCTGTAATTT TCTTTTTCA TTTCATCTTT ACCACATTTT TGTATCAGGT TCATACTGGC 9840 TTCATAGAAT GAGTTCAGGA ATGGTCCCTC CTCCTCGAAT TTTCTCTGTA GAATTAGTAC 9900 CAGCTCTTTG TGTGTCTGGG AGAAGTTGTA TGCCAATAAT TTAAATGCAG TTAATATTTA 9960 CTGGACAATT TCCTCCAGAT AATTGTATAT GATTTTTGGT CCACCCTGAG TTGATACATG 10020 TATTTTAATT GTATCATGGT ATGAAAAGAG CAAGAGTATT TGGTCACCTA GTCTTGCCTA 10080 TAGATGTGCC TAATGATTCA AAGTAGATAT TTTGGGAGCC TAACAGGTGC CGTGACTAGG 10240 AGTGGCATGA TCTCGGCTCA CTGCAACATC CGCCTCCTGG GTTCAAGCAA TTATACTGCC 10260 TCAGCCTCCC CAGTAGCTGG GACTACAGGC TCACGCCACC ACGCCTGGCT AATTTTTGTA 10320 TTTTTTAGTAG AGATGGGGTT TCACCATATT GGCCAGGCTG GTGTTGAACT CCTGGCCTCA 10380 TGATCCACCC GCCTCGGCCT CCCAATGTC TGGCCTTACA GGCGTGAGCC ACCGCACCCG 10440	GTGAATTGCA	TTTATTGAAT	TGTGCATGTT	GAGCCAAACT	TCCATCCCAG	GGATTAAACC	9360
GCTCACTGCA AGCTCCACCT CCCGATTTCA TGCCATTCTC CTGCCTCAGC CTCCCGATTA 9540 GCTGGGACTA CAGGCACCCG CTACCATACC CAGCTAATTT TTGTATTTTT TAGTAAAAAC 9600 AGGATTTCAC CATGTTAGCC AGGATGGTCT TGATCTCCTG ACCTCGTGAT CTGCCTGCCT 9660 CAGCCTCCCA AAGTGGCTAG TATTTTTTTA ATTACTATTT TTTCTCACCC TTGCTGCCAT 9720 CTTATGATTT TCTAGTATTT TGTTGAAGAT TTTTGCATCT ATTTTCATCA GGGATATTGG 9780 CCTGTAATTT TCTTTTTCA TTTCATCTTT ACCACATTTT TGTATCAGGT TCATACTGGC 9840 TTCATAGAAT GAGTTCAGGA ATGGTCCCTC CTCCTCGAAT TTTCTCTGTA GAATTAGTAC 9900 CAGCTCTTTG TGTGTCTGGG AGAAGTTGTA TGCCAATAAT TTAAATGCAG TTAATATTTA 9960 CTGGACAATT TCCTCCAGAT AATTGTATAT GATTTTTGGT CCACCCTGAG TTGATACATG 10020 TATTTTAATT GTATCATGGT ATGAAAAGAG CAAGAGTATT TGGTCACCTA GTCTTGCCTA 10080 TAGATGTGCC TAATGATTCA AAGTAGATAT TTTGGGAGCC TAACAGGTGC CGTGACTAGG 10140 CAGCTTTTGTT TTTTTTTTT TTTGAGACAG AGTCCTGTA TGCTCCCCAG GCTGGAGTGC 10200 AGTGGCATGA TCTCGGCTCA CTGCAACATC CGCCTCCTGG GTTCAAGCAA TTATACTGCC 10260 TCAGCCTCCC CAGTAGCTGG GACTACAGGC TCACGCCACC ACGCCTGGCT AATTTTTGTA 10320 TTTTTAGTAG AGATGGGGTT TCACCATATT GGCCAGGCTG GTGTTGAACT CCTGGCCTCA 10380 TGATCCACCC GCCTCGGCCT CCCAATGTC TGGGCCTTACA GCCGTACCCG 100440	TACTTAATCA	TGGTGTTAAC	TTTTTGATGT	GCTGCTGGAT	TTGGTTTGCT	AATTTTTTTT	9420
GCTGGGACTA CAGGCACCC CTACCATACC CAGCTAATT TTGTATTTT TAGTAAAAAC 9600 AGGATTTCAC CATGTTAGCC AGGATGGTCT TGATCTCCTG ACCTCGTGAT CTGCCTGCCT 9660 CAGCCTCCCA AAGTGGCTAG TATTTTTTA ATTACTATTT TTTCTCACCC TTGCTGCCAT 9720 CTTATGATTT TCTAGTATTT TGTTGAAGAT TTTTGCATCT ATTTTCATCA GGGATATTGG 9780 CCTGTAATTT TCTTTTTCA TTTCATCTTT ACCACATTTT TGTATCAGGT TCATACTGGC 9840 TTCATAGAAT GAGTTCAGGA ATGGTCCCTC CTCCTCGAAT TTTCTCTGTA GAATTAGTAC 9900 CAGCTCTTTG TGTGTCTGGG AGAAGTTGTA TGCCAATAAT TTAAATGCAG TTAATATTTA 9960 CTGGACAATT TCCTCCAGAT AATTGTATAT GATTTTTGGT CCACCCTGAG TTGATACATG 10020 TATTTTAATT GTATCATGGT ATGAAAAGAG CAAGAGTATT TGGTCACCTA GTCTTGCCTA 10080 TAGATGTGCC TAATGATTCA AAGTAGATAT TTTGGGAGCC TAACAGGTGC CGTGACTAGG 10140 CAGTTTTGTT TTTTTTTTT TTTGAGACAG AGTCTCGTTA TGCTGCCCAG GCTGGAGTGC 10260 AGTGGCATGA TCTCGGCTCA CTGCAACATC CGCCTCCTGG GTTCAAGCAA TTATACTGCC 10260 TCAGCCTCCC CAGTAGCTGG GACTACAGGC TCACGCCACC ACGCCTGGCT AATTTTTTTAT TTTTAGTAG AGATGGGGTT TCACCATATT GGCCAGGCTG GTGTTGAACT CCTGGCCTCA 10380 TGATCCACCC GCCTCGGCCT CCCAATGTGC TGGGCTTACA GGCGTGAGCC ACCGCACCCG 10440	ТТТТТТТТАА	AATGGATTCT	CCCTCTGTCC	CCCAGGCTGG	ATTGCAGTGG	TGTGATCTTG	9480
AGGATTTCAC CATGTTAGCC AGGATGGTCT TGATCTCCTG ACCTCGTGAT CTGCCTGCCT 9660 CAGCCTCCCA AAGTGGCTAG TATTTTTTA ATTACTATTT TTTCTCACCC TTGCTGCCAT 9720 CTTATGATTT TCTAGTATTT TGTTGAAGAT TTTTGCATCT ATTTTCATCA GGGATATTGG 9780 CCTGTAATTT TCTTTTTCA TTTCATCTTT ACCACATTTT TGTATCAGGT TCATACTGGC 9840 TTCATAGAAT GAGTTCAGGA ATGGTCCCTC CTCCTCGAAT TTTCTCTGTA GAATTAGTAC 9900 CAGCTCTTTG TGTGTCTGGG AGAAGTTGTA TGCCAATAAT TTAAATGCAG TTAATATTTA 9960 CTGGACAATT TCCTCCAGAT AATTGTATAT GATTTTTGGT CCACCCTGAG TTGATACATG 10020 TATTTTAATT GTATCATGGT ATGAAAAGAG CAAGAGTATT TGGTCACCTA GTCTTGCCTA 10080 TAGATGTGCC TAATGATTCA AAGTAGATAT TTTGGGAGCC TAACAGGTGC CGTGACTAGG 10140 CAGTTTTGTT TTTTTTTTT TTTGAGACAG AGTCTCGTTA TGCTGCCCAG GCTGGAGTGC 10260 AGTGGCATGA TCTCGGCTCA CTGCAACATC CGCCTCCTGG GTTCAAGCAA TTATACTGCC 10260 TCAGCCTCCC CAGTAGCTGG GACTACAGGC TCACGCCACC ACGCCTGGCT AATTTTTGTA 10320 TTTTTAGTAG AGATGGGGTT TCACCATATT GGCCAGGCTG GTGTTGAACCT CCTGGCCTCA 10380 TGATCCACCC GCCTCGGCCT CCCAATGTGC TGGGCTTACA GCCGCACCC ACCGCACCC ACCGCCACCC ACCGCACCC ACCGCCACCC ACCGCCACCC ACCGCCACCC ACCGCACCC ACCGCCACCC ACCGCCACCC ACCGCCACCC ACCGCCACCC ACCGCCACCC ACCGCCACCC ACCGCCACCC ACCGCACCC ACCGCACCC ACCGCCACCC ACCGCACCC ACCGCACC	GCTCACTGCA	AGCTCCACCT	CCCGATTTCA	TGCCATTCTC	CTGCCTCAGC	CTCCCGATTA	9540
CAGCCTCCCA AAGTGGCTAG TATTTTTTA ATTACTATT TTTCTCACCC TTGCTGCCAT 9720 CTTATGATTT TCTAGTATTT TGTTGAAGAT TTTTGCATCT ATTTTCATCA GGGATATTGG 9780 CCTGTAATTT TCTTTTTCA TTTCATCTTT ACCACATTTT TGTATCAGGT TCATACTGGC 9840 TTCATAGAAT GAGTTCAGGA ATGGTCCCTC CTCCTCGAAT TTTCTCTGTA GAATTAGTAC 9900 CAGCTCTTTG TGTGTCTGGG AGAAGTTGTA TGCCAATAAT TTAAATGCAG TTAATATTTA 9960 CTGGACAATT TCCTCCAGAT AATTGTATAT GATTTTTGGT CCACCCTGAG TTGATACATG 10020 TATTTTAATT GTATCATGGT ATGAAAAGAG CAAGAGTATT TGGTCACCTA GTCTTGCCTA 10080 TAGATGTGCC TAATGATTCA AAGTAGATAT TTTGGGAGCC TAACAGGTGC CGTGACTAGG 10140 CAGTTTTGTT TTTTTTTTT TTTGAGACAG AGTCTCGTTA TGCTGCCCAG GCTGGAGTGC 10200 AGTGGCATGA TCTCGGCTCA CTGCAACATC CGCCTCCTGG GTTCAAGCAA TTATACTGCC 10260 TCAGCCTCCC CAGTAGCTGG GACTACAGGC TCACGCCACC ACGCCTGGCT AATTTTTGTA 10320 TTTTTAGTAG AGATGGGGTT TCACCATATT GGCCAGGCTG GTGTTGAACT CCTGGCCTCA 10380 TGATCCACCC GCCTCGGCCT CCCAATGTGC TGGGCTTACA GGCGTGAGCC ACCGCACCCG 10440	GCTGGGACTA	CAGGCACCCG	CTACCATACC	CAGCTAATTT	TTGTATTTT	TAGTAAAAAC	9600
CTTATGATT TCTAGTATT TGTTGAAGAT TTTTGCATCT ATTTCATCA GGGATATTGG 9780 CCTGTAATTT TCTTTTTCA TTTCATCTTT ACCACATTTT TGTATCAGGT TCATACTGGC 9840 TTCATAGAAT GAGTTCAGGA ATGGTCCCTC CTCCTCGAAT TTTCTCTGTA GAATTAGTAC 9900 CAGCTCTTTG TGTGTCTGGG AGAAGTTGTA TGCCAATAAT TTAAATGCAG TTAATATTTA 9960 CTGGACAATT TCCTCCAGAT AATTGTATAT GATTTTTGGT CCACCCTGAG TTGATACATG 10020 TATTTTAATT GTATCATGGT ATGAAAAGAG CAAGAGTATT TGGTCACCTA GTCTTGCCTA 10080 TAGATGTGCC TAATGATTCA AAGTAGATAT TTTGGGAGCC TAACAGGTGC CGTGACTAGG 10140 CAGTTTTGTT TTTTTTTT TTTGAGACAG AGTCTCGTTA TGCTGCCCAG GCTGGAGTGC 10200 AGTGGCATGA TCTCGGCTCA CTGCAACATC CGCCTCCTGG GTTCAAGCAA TTATACTGCC 10260 TCAGCCTCCC CAGTAGCTGG GACTACAGGC TCACGCCACC ACGCCTGGCT AATTTTTGTA 10320 TTTTTAGTAG AGATGGGGTT TCACCATATT GGCCAGGCTG GTGTTGAACT CCTGGCCTCA 10380 TGATCCACCC GCCTCGGCCT CCCAATGTGC TGGGCTTACA GGCGTGAGCC ACCGCACCCG 10440	AGGATTTCAC	CATGTTAGCC	AGGATGGTCT	TGATCTCCTG	ACCTCGTGAT	CTGCCTGCCT	9660
CCTGTAATTT TCTTTTTCA TTTCATCTTT ACCACATTTT TGTATCAGGT TCATACTGGC 9840 TTCATAGAAT GAGTTCAGGA ATGGTCCCTC CTCCTCGAAT TTTCTCTGTA GAATTAGTAC 9900 CAGCTCTTG TGTGTCTGGG AGAAGTTGTA TGCCAATAAT TTAAATGCAG TTAATATTTA 9960 CTGGACAATT TCCTCCAGAT AATTGTATAT GATTTTTGGT CCACCCTGAG TTGATACATG 10020 TATTTTAATT GTATCATGGT ATGAAAAGAG CAAGAGTATT TGGTCACCTA GTCTTGCCTA 10080 TAGATGTGCC TAATGATTCA AAGTAGATAT TTTGGGAGCC TAACAGGTGC CGTGACTAGG 10140 CAGTTTTGTT TTTTTTTT TTTGAGACAG AGTCTCGTTA TGCTGCCCAG GCTGGAGTGC 10200 AGTGGCATGA TCTCGGCTCA CTGCAACATC CGCCTCCTGG GTTCAAGCAA TTATACTGCC 10260 TCAGCCTCCC CAGTAGCTGG GACTACAGGC TCACGCCACC ACGCCTGGCT AATTTTTGTA 10320 TTTTTAGTAG AGATGGGGTT TCACCATATT GGCCAGGCTG GTGTTGAACT CCTGGCCTCA 10380 TGATCCACCC GCCTCGGCCT CCCAATGTGC TGGGCTTACA GGCGTGAGCC ACCGCACCCG 10440	CAGCCTCCCA	AAGTGGCTAG	ТАТТТТТТТА	ATTACTATTT	TTTCTCACCC	TTGCTGCCAT	9720
TTCATAGAAT GAGTTCAGGA ATGGTCCCTC CTCCTCGAAT TTTCTCTGTA GAATTAGTAC 9900 CAGCTCTTTG TGTGTCTGGG AGAAGTTGTA TGCCAATAAT TTAAATGCAG TTAATATTTA 9960 CTGGACAATT TCCTCCAGAT AATTGTATAT GATTTTTGGT CCACCCTGAG TTGATACATG 10020 TATTTTAATT GTATCATGGT ATGAAAAGAG CAAGAGTATT TGGTCACCTA GTCTTGCCTA 10080 TAGATGTGCC TAATGATTCA AAGTAGATAT TTTGGGAGCC TAACAGGTGC CGTGACTAGG 10140 CAGTTTTGTT TTTTTTTT TTTGAGACAG AGTCTCGTTA TGCTGCCCAG GCTGGAGTGC 10200 AGTGGCATGA TCTCGGCTCA CTGCAACATC CGCCTCCTGG GTTCAAGCAA TTATACTGCC 10260 TCAGCCTCCC CAGTAGCTGG GACTACAGGC TCACGCCACC ACGCCTGGCT AATTTTTGTA 10320 TTTTTAGTAG AGATGGGGTT TCACCATATT GGCCAGGCTG GTGTTGAACT CCTGGCCTCA 10380 TGATCCACCC GCCTCGGCCT CCCAATGTGC TGGGCTTACA GGCGTGAGCC ACCGCACCCG 10440	CTTATGATTT	TCTAGTATTT	TGTTGAAGAT	TTTTGCATCT	ATTTTCATCA	GGGATATTGG	9780
CAGCTCTTTG TGTGTCTGGG AGAAGTTGTA TGCCAATAAT TTAAATGCAG TTAATATTTA 9960 CTGGACAATT TCCTCCAGAT AATTGTATAT GATTTTTGGT CCACCCTGAG TTGATACATG 10020 TATTTTAATT GTATCATGGT ATGAAAAGAG CAAGAGTATT TGGTCACCTA GTCTTGCCTA 10080 TAGATGTGCC TAATGATTCA AAGTAGATAT TTTGGGAGCC TAACAGGTGC CGTGACTAGG 10140 CAGTTTTGTT TTTTTTTT TTTGAGACAG AGTCTCGTTA TGCTGCCCAG GCTGGAGTGC 10200 AGTGGCATGA TCTCGGCTCA CTGCAACATC CGCCTCCTGG GTTCAAGCAA TTATACTGCC 10260 TCAGCCTCCC CAGTAGCTGG GACTACAGGC TCACGCCACC ACGCCTGGCT AATTTTTGTA 10320 TTTTTAGTAG AGATGGGGTT TCACCATATT GGCCAGGCTG GTGTTGAACT CCTGGCCTCA 10380 TGATCCACCC GCCTCGGCCT CCCAATGTGC TGGGCTTACA GGCGTGAGCC ACCGCACCCG 10440	CCTGTAATTT	TCTTTTTCA	TTTCATCTTT	ACCACATTTT	TGTATCAGGT	TCATACTGGC	9840
CTGGACAATT TCCTCCAGAT AATTGTATAT GATTTTTGGT CCACCCTGAG TTGATACATG 10020 TATTTTAATT GTATCATGGT ATGAAAAGAG CAAGAGTATT TGGTCACCTA GTCTTGCCTA 10080 TAGATGTGCC TAATGATTCA AAGTAGATAT TTTGGGAGCC TAACAGGTGC CGTGACTAGG 10140 CAGTTTTGTT TTTTTTTTT TTTGAGACAG AGTCTCGTTA TGCTGCCCAG GCTGGAGTGC 10200 AGTGGCATGA TCTCGGCTCA CTGCAACATC CGCCTCCTGG GTTCAAGCAA TTATACTGCC 10260 TCAGCCTCCC CAGTAGCTGG GACTACAGGC TCACGCCACC ACGCCTGGCT AATTTTTGTA 10320 TTTTTTAGTAG AGATGGGGTT TCACCATATT GGCCAGGCTG GTGTTGAACT CCTGGCCTCA 10380 TGATCCACCC GCCTCGGCCT CCCAATGTGC TGGGCTTACA GGCGTGAGCC ACCGCACCCG 10440	TTCATAGAAT	GAGTTCAGGA	ATGGTCCCTC	CTCCTCGAAT	TTTCTCTGTA	GAATTAGTAC	9900
TATTTTAATT GTATCATGGT ATGAAAAGAG CAAGAGTATT TGGTCACCTA GTCTTGCCTA 10080 TAGATGTGCC TAATGATTCA AAGTAGATAT TTTGGGAGCC TAACAGGTGC CGTGACTAGG 10140 CAGTTTTGTT TTTTTTTTT TTTGAGACAG AGTCTCGTTA TGCTGCCCAG GCTGGAGTGC 10200 AGTGGCATGA TCTCGGCTCA CTGCAACATC CGCCTCCTGG GTTCAAGCAA TTATACTGCC 10260 TCAGCCTCCC CAGTAGCTGG GACTACAGGC TCACGCCACC ACGCCTGGCT AATTTTTGTA 10320 TTTTTTAGTAG AGATGGGGTT TCACCATATT GGCCAGGCTG GTGTTGAACT CCTGGCCTCA 10380 TGATCCACCC GCCTCGGCCT CCCAATGTGC TGGGCTTACA GGCGTGAGCC ACCGCACCCG 10440	CAGCTCTTTG	TGTGTCTGGG	AGAAGTTGTA	TGCCAATAAT	TTAAATGCAG	TTAATATTTA	9960
TAGATGTGCC TAATGATTCA AAGTAGATAT TTTGGGAGCC TAACAGGTGC CGTGACTAGG 10140 CAGTTTTGTT TTTTTTTTT TTTGAGACAG AGTCTCGTTA TGCTGCCCAG GCTGGAGTGC 10200 AGTGGCATGA TCTCGGCTCA CTGCAACATC CGCCTCCTGG GTTCAAGCAA TTATACTGCC 10260 TCAGCCTCCC CAGTAGCTGG GACTACAGGC TCACGCCACC ACGCCTGGCT AATTTTTGTA 10320 TTTTTAGTAG AGATGGGGTT TCACCATATT GGCCAGGCTG GTGTTGAACT CCTGGCCTCA 10380 TGATCCACCC GCCTCGGCCT CCCAATGTGC TGGGCTTACA GGCGTGAGCC ACCGCACCCG 10440	CTGGACAATT	TCCTCCAGAT	AATTGTATAT	GATTTTTGGT	CCACCCTGAG	TTGATACATG	10020
CAGTTTTGTT TTTTTTTTT TTTGAGACAG AGTCTCGTTA TGCTGCCCAG GCTGGAGTGC 10200 AGTGGCATGA TCTCGGCTCA CTGCAACATC CGCCTCCTGG GTTCAAGCAA TTATACTGCC 10260 TCAGCCTCCC CAGTAGCTGG GACTACAGGC TCACGCCACC ACGCCTGGCT AATTTTTGTA 10320 TTTTTAGTAG AGATGGGGTT TCACCATATT GGCCAGGCTG GTGTTGAACT CCTGGCCTCA 10380 TGATCCACCC GCCTCGGCCT CCCAATGTGC TGGGCTTACA GGCGTGAGCC ACCGCACCCG 10440	ТАТТТТААТТ	GTATCATGGT	ATGAAAAGAG	CAAGAGTATT	TGGTCACCTA	GTCTTGCCTA	10080
AGTGGCATGA TCTCGGCTCA CTGCAACATC CGCCTCCTGG GTTCAAGCAA TTATACTGCC 10260 TCAGCCTCCC CAGTAGCTGG GACTACAGGC TCACGCCACC ACGCCTGGCT AATTTTTGTA 10320 TTTTTAGTAG AGATGGGGTT TCACCATATT GGCCAGGCTG GTGTTGAACT CCTGGCCTCA 10380 TGATCCACCC GCCTCGGCCT CCCAATGTGC TGGGCTTACA GGCGTGAGCC ACCGCACCCG 10440	TAGATGTGCC	TAATGATTCA	AAGTAGATAT	TTTGGGAGCC	TAACAGGTGC	CGTGACTAGG	10140
TCAGCCTCCC CAGTAGCTGG GACTACAGGC TCACGCCACC ACGCCTGGCT AATTTTTGTA 10320 TTTTTTAGTAG AGATGGGGTT TCACCATATT GGCCAGGCTG GTGTTGAACT CCTGGCCTCA 10380 TGATCCACCC GCCTCGGCCT CCCAATGTGC TGGGCTTACA GGCGTGAGCC ACCGCACCCG 10440	CAGTTTTGTT	ጥጥጥጥጥጥጥ	TTTGAGACAG	AGTCTCGTTA	TGCTGCCCAG	GCTGGAGTGC	10200
TTTTTAGTAG AGATGGGGTT TCACCATATT GGCCAGGCTG GTGTTGAACT CCTGGCCTCA 10380 TGATCCACCC GCCTCGGCCT CCCAATGTGC TGGGCTTACA GGCGTGAGCC ACCGCACCCG 10440	AGTGGCATGA	TCTCGGCTCA	CTGCAACATC	CGCCTCCTGG	GTTCAAGCAA	TTATACTGCC	10260
TGATCCACCC GCCTCGGCCT CCCAATGTGC TGGGCTTACA GGCGTGAGCC ACCGCACCCG 10440	TCAGCCTCCC	CAGTAGCTGG	GACTACAGGC	TCACGCCACC	ACGCCTGGCT	AATTTTTGTA	10320
	TTTTTAGTAG	AGATGGGGTT	TCACCATATT	GGCCAGGCTG	GTGTTGAACT	CCTGGCCTCA	10380
	TGATCCACCC	GCCTCGGCCT				ACCGCACCCG	10440

GAGATTAGGC	ААТТТТАТАТ	TCCCAAATAT	CCAACTCTTC	TGACCCGCTT	TCTCAGCCTG	10500
GGTGTATCAG	GCACAAGGCC	TGTTCAGATT	ATGTGGTCTC	TGAAGATATG	GCTCTCCAGG	10560
GTTGACAATG	TGGATAAGGA	TTCACCTGGT	TTAGGATTTA	CACATTCGCC	TTGAATGTCT	10620
GTTGCATCAA	GTAGACAGTC	CATCCCAACT	TGGCCATTTG	GTCAGAGCTG	TAAGGAGACA	10680
AGGAGGTGGG	CAGCCGCTGC	TGTGAACTGC	TTGGACAAAG	ACTGCCAAAT	AGCTATCAGA	10740
CAGTGTTAAC	AACAGCTGAT	TTAGGTTTGA	AGGGGGCAGT	CTCTTGGGCC	ACTTACTATG	10800
CTGCATCATC	CTCTTTGGAA	AATGCTCTTC	AGGTAACTGC	CTAACAGACT	GAGAAAATAA	10860
AATGCTCACA	GAGAAAAAG	ACCCGGAAAG	TCTGACTTCT	CAGAGCTCAG	TGTTTAGGTG	10920
CAGAACTGGA	TTGTGAAAGG	ATTTTTAAAT	ТТТТТАТАТТ	CATTGCAGGG	AACATTCATT	10980
TATTCCATCC	TTCTCCACTC	CCACCTGTCT	GTCGTTGTCT	TTGTCTCTGT	CTCCCCACCT	11040
CTCTCTCTAG	ACACACACAC	ACACACACAC	ACACACACAC	ACACACACAC	ACACACACAC	11100
ACACACACAC	ACACACACAC	ACACACACCC	CTATTCATTG	CCAACAGTAA	TAGAGTTGCT	11160
TCTTTACTTC	TTGGAGAGAA	AAGCCTCAAT	CTGAGGAAGC	TGTGCTGACT	AGCCTTGCTC	11220
TTAATCATGG	AGACAATGCT	TTATGCCTTT	ATCTTTGCAC	AGCTGAAAGC	CATGGCAGAA	11280
GCAGTCCTCT	AAACGAAATA	AAATAGAAAG	GTTCCTGCTA	AGCCCTGGCA	AATGCAGCCT	11340
TCTATCCCTC	CCCCAACACT	CACAGCTTCT	GAGCAAGATG	TAGCTGCCTT	CCAGGAGGCT	11400
GGGTGATGGG	CAATAATGAG	CAGAGCCACG	TGAAGGAAAG	ATGGGTGAAG	AAATGTGTGT	11460
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TACTCCTTTG	GTAACTGTTC	TGAAATTATA	ACTTGCCAGA	AGTTCAGAAG	GACCTAGTGC	11580
AGGTATTAGA	GGAAATTCGT	AAGATTGAGC	CATTTATTCC	TGCACAGATA	CATAATAATG	11640
GACACGGGCC	ATGGTGGCCA	GCATTCTTGC	TCTTGACAAT	GGTGAAGGGA	AGGGTTGTAG	11700
GTCATGGCTA	TGCTCTCAGA	ATTATAATGG	AAAGAAACAG	CTCCTGAGTG	TTTACTATGA	11760
GCCAAGGGCT	GTGCTAAACA	CTTTACCATA	TGATGACATC	TTTTTCTCAC	AGGTATCAAA	11820
		SURST	TITUTE SHEET	(Rule 26)		

AAACAATAGG	ACATACCGGA	TAGCTACAAT	CTTTGGGCCC	CTGCAAACAC	AATAATGTGT	11880
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AAAATAAAA	CATATAAAGT	ACTACTTTTG	TTTTTTGAGA	TGGAGTCTCG	CTCTGTCACC	12000
CAGACTGGAG	TGCAATAGCA	TGATCGTGGC	TCACTGCAAC	CCCCTGCTCC	TGGGCTCAAG	12060
TGATTCTCCT	GACTCAGCCT	CTCAAGTAGC	TGGGATTACA	GGCGCACGCC	CCCATGCCTG	12120
GCTAATTTTT	GTACTTTTAA	TAGAGACCAG	GTTTCACCAT	GTTGGCCAGG	CTGGTCTCAA	12180
ACTCCTGACC	TCAAGTGATC	CACCTGCCTC	GGCCTTCCAA	AGTGCTGGCA	TTACAGATGT	12240
GAGCCACTGC	ACCCGGCCCA	TATAAAGTAC	TACTAATGTA	ACAGGGTGCT	AGTCCAGACA	12300
GTGACCACAC	GTGGTGTTCA	TTGAAGGCTG	GACTAACAAC	TCCAGCCTCT	CCGCCATCAC	12360
AGAGTGATGA	CTGCCTTCCC	TGAAGCAAAG	CTTCTGGTTC	AAGGAAAGGC	CAGTAAGTGA	12420
CTGCTCTTTG	TTGTATACAT	GTTAGATGAT	CAGGCCTCAA	GAAAAGTATA	AAGAGATCTT	12480
TGTGCTCTCT	GGGACTCAAA	AAGCTGCACT	CTTTGGGGGA	AGGATAGCCA	GGTAAAAGTG	12540
GCCCAGGTAA	AGAGGGCCTG	GTACACCTGG	TTCTGCAAGA	TGGTAGACAC	AAAAATGAGA	12600
GCCACATTTG	GAGCTTATGT	GCCCCTAACT	CTGTACATAA	CCTGCAAGAT	СТААТТАСТА	12660
ACAACTGGAA	TCTTGGAAAC	ACCTGTAGTA	CATCCTTGGC	TAAGGTTAGC	CCCAACAGAG	12720
AGGGCTCTCC	TCTTACAGAG	AACCATTACA	TTTGTGCCTT	CATCCTAGAG	TAGAAAAGGC	12780
ATGATCAGAC	TACTAAAAAG	ACATCAGGAA	AGGGCCTGTG	ACATCTGAGG	GAAGTGGTTG	12840
CCCTCTCTGG	GATGTTGGTT	CGGGAAGAGG	GGCATGGAGG	AGTGCCTGCT	TTAGATGGTC	12900
ATTCAGGAAC	CCAGGCTGAT	AGTGAGAGGT	GAAGCCAGCT	GGGCTTCTGG	GCTAGGGGG	12960
ACTTGGAGAA	CTTTTGTGTC	TAGCTAAAGG	ATTGTAAATG	CACCAATCAG	CACTCTGTAA	13020
AATGGACCAA	TCAGCACTCT	GTAAAATGGA	CCAATCAGCA	GGATGTGGGC	AGGGCCAAAT	13080
AAGGGAATAA	AAGCTGGCCA	CCAGAGCCAG	CAGTGGCAAA	CTGCTCAGGT	CCCCTTCCAC	13140
GCTGTGGAAG	CTTTGTTCTT	TTGCTCTTCA	СААТАААТСТ	TGCTGCTGCT	CACTCTTTGG	13200

GTCTGCACTA	TCTTTATGAG	CTGTAACACT	CACCGTGAGG	GTCTGTGGCT	TCATTCCTGA	13260
AGTCAGTGAG	ACCACAAACC	CACTGGGAGG	AACAAACAAC	TCTGGACACG	ССААСТТТАА	13320
GAGCTGTĄAC	ATTCACTGCG	AAGGTCTGCG	GCTTCACCTC	TGAAGTCAGC	GAGACTATGA	13380
ACCCACTGGA	AGGAAGAAAC	TCCAGACACA	TCTGAACATC	TGAAGGAAGA	AACTCCAGAC	13440
ACACCATCTT	TAAGAGCTGT	AACACTCACT	GCAAGGGTCT	GCGGCTTCAT	TCTTGAAGTC	13500
AGCAAGACCA	AGAACCCACT	GGAAGGAAAC	AATTCCGGAC	ACATTTTGGT	GACCCAGATG	13560
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TCCTTAGAAT	TCGGGGGCTA	AATATTGGGC	ACCTGTCAGC	CAGTTAAAAG	CGACTAGCAT	13680
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AATAACCCCC	AACTCTTTGG	AGTTGGGAGC	GTTGGTTTGC	CTGGAACCAG	CTTCCACATT	13800
TCCTGTACTT	CTGGGCTGAG	ACGAGGGTCA	ACAGAGAGGA	AAGCCATTCA	GCTCTGGGGT	13860
CCCGACAGCA	AGTTGGTTGA	CCCTGTGGCC	ATGAACAGAA	CTCTCGAAGT	CATGTTGCCC	13920
AAGCGAGACT	CACCCATCTA	TCCTATCTAT	CCTGACTCTT	GCTTCCTGGG	TCCTAATGCC	13980
TGGAAGACAA	AACTTCCTCT	TGTCTCTGTT	CTCCAAGGCT	AGTCCCACTT	СТАААААССА	14040
CTCCCTGTCT	CTGGTGCTTT	TCTAGTTTCT	CCTATAAGAA	TGATTTCTAG	TATAAACTCC	14100
AGGACTCTAT	TCTCTTCTTT	AGGCACCCGG	GCTCACCAAT	CAGAAAGCCA	TAATTTTTGC	14160
CCAAAGCCCC	ATCTTAGGGG	GGACTATCTG	GAATTTTAGG	ATCCCTCCTC	AGACAAGCAG	14220
GCCTAACAAA	AGCTATTCCT	GAAGCTAGGA	TATGGGGAGC	CTCAGAAATG	ATATCCTTCC	14280
TATTCAAGTG	AGGACAAAAG	GCATCACTCT	TCCAATTCTG	GAAATCCCTT	CCCTCCCTCA	14340
GGGTATGGCC	CTCCACTTCA	CTTTTGGGGC	ATAACGTCTT	TATAGGACAC	GGGTAAAGTC	14400
CCAATGCTAA	CAGGAGAATG	TTTAGGACTC	TAACAGGTTT	TCAAGAATGT	GTCGGTAAGG	14460
GCCACTAAAT	CCGATTTTTC	TCAGTCCTCT	TTGTGGTCTA	GGAGGACAGG	TAAGGGTGCA	14520
GGTTTTCAAA	AATGTGTTGG	TAAGGGCCAC	TAAATCTGAC	ATTCCTTGGT	CCTCCTTGTG	14580
		CUDCT	orani mere di territori	(D1- 2C)		

GTCTAGGAGG	AAAACTAGTG	TTTCTGCTGC	TGCATCAGTG	AGCGCAACTA	TTCCAATCAA	14640
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GGGGGAACA	AACAGACCAA	AACTGGGGGC	AGTTTTGTCT	TTCAGATGGG	AAACACTCAG	14820
GCACCAACAG	GCTCACCCTT	GAAATGTATC	CTAAGCCATT	GGGACTAATT	TGACCCGCAA	14880
ACCCTGAAAA	AGAGTGGCTC	ATTTTATTCT	GCACTATGGC	CTGGTCCCAA	TATTCTCTCT	14940
CTGATGGGGA	AAAATGGCCA	CCTGAAGGAA	GTATAAATTA	СААТАСТАТС	CTGCAGCTTG	15000
ACCTTTTCTG	TAAGAAGGAA	AGCAAATGGA	GTGAAATACC	TTATGTCCAA	ACTTTCTTTT	15060
CATTAAAGGA	AAATCCACAA	CTATGCAAAA	CTTACAATTC	ACATCCCACA	AGAGGACCTC	15120
TCAGCTTACC	CCCATATCAT	AGCTTCCCTA	TAGCTCCCCT	TCCTATTAAT	GATAAGCCTC	15180
CTTAATCTCC	CCCACCCAGA	AGGAAACAAG	CAAAGAAATC	TCCAAAGGAC	CACAAAAACC	15240
CCTGGGCTAT	CGGTTATGTC	CCCTTCAAGC	TGTAGCGGGG	GAGGGGAATT	TGGCCCAACC	15300
CAGGTACATG	TCCCCTTCTC	CCTCTCTGAT	TTAAAGCAGA	TCAAGGCAGA	CCAGGGGAAG	15360
CTTTCAGATG	ATCCTGATAG	GTATACAGAT	GTCCTACAGG	GTCTAGGGCA	AACCTTCAAT	15420
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GATCCCCACT	GGGACCTAGA	CTCAGATCAT	TGGGACTGGA	GTCGCAAACA	TCTGTTGACC	15660
TGTGTTCTAG	AAAGACTAAG	GAGAATTAGG	AAAGAGCCTA	TGAATTATTC	AATGATGTCC	15720
ACCATAACTO	: AGGAAAAGGA	AGAAAGTCTT	GCCTTCCCTT	GAGTGGCTAC	AGGGAGGCCT	15780
TAAGGAAAAT	' ATAACTCCCC	TGTCACCCAA	CTCACTTCAA	GGGTTAATTG	ATTCTAAAAG	15840
ATATGTTTAT	TACTCAATCA	GCTGCAGATA	TCAGGAGAAA	GCTCCAAAAG	CAAGCCCTTG	15900
GCCCTGAACA	AAATCTGGAG	GCATTATTAA	ACCTGGCAAC	CTTGGTGTTC	TATAATAGGG	15960

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TGAGGCCTAG	ACTCTCTTAC	TGCTGAGAAA	GGAAGATTCT	GCACTTCTTA	GGGGTAGAGT	17700
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AGATGATCTT	ACAAATGTAA	CCCCAAATGA	GCTCAACTAA	CAACTTCTGC	TGAGGACCCC	18000
TGGACCGACC	CGCTGGCCCT	TTCAATGGCC	TAAAGAGCTC	CCCTCTGGAG	GACACTACCA	18060
CTGCAGGGCC	CCTTCTTCAC	CCCTATCCAG	CAGGAAGTAG	CTACAGCGGT	CATCGCCAAA	18120
TCCCAACAGC	AGCTGGGGTG	TCCTGTTTGG	AGGGGGGATT	GAGAGGTGAA	GCCAGCTGGG	18180
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CCAATCAGCA	CTCTGTGTCT	AGCTAAAGGA	TTGTAAATGC	ACCAATCAGC	ACTCTGTAAA	18300
ATGGACCAAT	CAGCAGGATG	TGGGCGGGGT	CAAATAAGGG	AGTAAAAACT	GGCCACCCGA	18360
GCCAGCAGTG	GCAACCCACT	CGGGTCCCCT	TCCACACTGT	GGAAGCTTTG	TTCTTTTGCT	18420
CTTCACAATA	AATCTTGCTG	CTGCTCATTC	TTTGTGTCCA	CACTACCTTT	ATGAGCTGTA	18480
ACACTCACTG	CGAGGGTCTG	TGGCTTCATT	CCTGAAGTCA	ACAGACCACG	AACCCACTGG	18540
AAGGAACAAA	GAACTCCCGA	TGTGCTGCCT	TTAAGAGCTG	TAACACTCAC	TGCGAAGCTC	18600
TGCAGCTTCA	CTCCTGAAGT	CAGTGAGACC	ACAAACCCAC	CAGAAGGAAG	AAACTCTGGA	18660
CACACCTGAA	TATCTGAAGG	AACAAACTCC	AGACACACCA	TCTTTCAGAG	CTGTAACACT	18720
		CUIDCT	יים שון פעובויו	(Pule 26)		

CACCGCAAGG	GTCTGTGGCT	TCATTCTTGA	AGTCAGCAAG	ACCAAGAACC	CACCGGAAGG	18780			
AACAAATTCC	AGACACAGTA	GGAAATCTGT	ATTTTTGATC	TGTGGCTTCC	AGGGTTACTC	18840			
CAGTCATTGA	AGTCTCCATT	GCAGCCTTAA	GGAAACAGAG	AATGGTTTGG	AGGAGCACAT	18900			
GTGGGAATTG	TTATGGACCA	GGCTTGAGAT	GCACATAGGG	CATTTCTGAT	CAAACCTAGC	18960			
TGGAAGCAGG	GCCAGGAAAT	ATAATCTAAG	GAAGACAGTT	TTTGTAGACA	GTAGTAGTCT	19020			
TTGCATCTGA	GACATGTAGA	TTATCAAGCA	ATTAATTAGA	AAAAATATAG	CCAGGTGCGA	19080			
TGGCTCATGC	CTGTAATCCC	AGCACTTTGG	GAGGCCAAGG	GGTGTGGATC	ACAAGGTCAG	19140			
GCGTTCGAGA	CCAGCCTGGC	CAACATGGTG	AAACCCCGTC	тстасталал	ATACAAAAAT	19200			
TAGCCTGGTG	TGGTGGCACG	CATCTGTAAT	CCCAGTACTC	AGGAGGCTGA	GGCAGGGGAA	19260			
TCTCTTGAAC	TTGGGAGGCA	GAGGTTGCAG	TGAGCCAAGA	TCACACCACA	GCACTCCATC	19320			
CTGGGTGACA	GAGCGAGACT	CTGTCTCAAA	АААААААА	AAAAAAGGAA	AGGAAAATAT	19380			
AATCAAGAAT	ATTGACAGGT	AACATTTATT	CAACACTTAC	TATGCACCAG	GCAATACACT	19440			
AAGTGTTTTA	CATGGATTAA	CTCATTTAAT	CTTAACAATA	GCCCTATGAA	GTCAGTGCTG	19500			
TTATTATCTC	CACTTTATAG	ATAAGGAAAC	TGAAGTACAG	AAAGGTCAAG	TAGAGAAATG	19560			
GCCATGCTTG	CATTCTCAGT	TTTTGAAGCA	ACTGTTACAG	GAATCTGGTG	TGAGAAATGC	19620			
TCTAACAAGA	TGTGAGTCAG	GGGTTGGGAG	GTACTGAGTC	TGAGTTGGGC	AGTTGGGGAT	19680			
GGAAGGATGG	ATGAAGAACA	GCTTGACAGA	GAAGCTGACA	CTTGGCAACT	CTGTGGGACC	19740			
TTGAAGGGTT	AGAGGGACTT	CACCAAAGAA	ACTGGTGGTC	AGGGAAACGG	GAGGGTCACG	19800			
GCAAGGAGGG	AAAGGAAACT	GTACCACAGC	AGAGAGTCTG	AAGCTACTAC	AGTGTAGTTC	19860			
AGCGTATAAA	GAATAATTAT	TTTAAGGTAA	ACTTATAACC	TCATGCAAAT	ATAAAATGAA	19920			
CACGTGTCAA	AGATCTTATT	ТААТТТАТТА	ATTAATGAGG	GAACCTGTAA	GATGTTACAG	19980			
CCAGTTCAAA	GGATAATTCA	AATAAATCCA	TGCACATATG	TAGGCAATAA	GGAATGCTGA	20040			
AATGAATTTA	AAAGTAGATG				GTTGCATTTC	20100			
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ACATAACAAA ATTCAGTTGC TTTTCTACAG AAGGAATTGT TTGCATCATT ACCAATTTTT 20160 CTACAACTAA CAGAATTATA AAATAACTCA AACACAATGA AAGGCAGATA TAACCCACAA 20220 TGGTATGATA GATACAATAT CCACATCCAG GATGTTTTTT TCTCATTTCA AAGTCTTTCA 20280 CAAGTTTTCC TGATAAGGGA GTGTCAATAA TACTGTATGG CAGGCAATAA GACTGGATGG 20340 ATGGTTGGGG CCAGGTTTTA AGGGGTAATA AATGCCATGT AAAGGTATGT GCATACTGTG 20400 CAACATGTCG GGGGAATCTC AAATTATTGG TAGAGTATGT AGGAAACACT TGTGGGAGCT 20460 TGTTAATAAA TTCAAATTCC CAGACCCAAC TCCTCAAGGG GTCTAATACA GTAGGTTTGG 20520 AGTAAAGCCT GAAAATCTGC AATTGTGCAA AAAAAAAACC CAGGTGATTC TGATACACTT 20580 TGAGAAGCAC TGGTGGAACT AATAGTCACT GAACGTTTTT GAGCAGGGGA GAAACCTGAG 20640 GACGTCTATG TTGCAGCAGT GGAAACTTGA TTAGAAGTAG GAGAAGATGC ATGGTCTTAA 20700 AAGAATGCAA AATGATGGCT AATATTTGAG TGCTTATGAT GGGCCAGGGG CTGTGCTAGG 20760 CGCGTGGCAC ACATTCAATA CGATGGAAGC CTGTACCAGT CAGTATTAGT GGGGTATCTT 20820 TAAGAGTGAC CAGAATTAAG GGGGGTTTTC ACCAAAGCCT GAGGACTGAG CCTCCTCATC 20880 CTAAATTCAG ACACAATGCT GTACCTATGC ATTTGCCTCC AGGCTGTTCC TGGGCCTCCA 20940 GGGACTGGCC CAGGCTCCTG ATAAATAGGG ACTCCCAACA ACATAAAGCC TGGATTTTGG 21000 AACTTCCTGA ATGTTACTCA GGCTTTCTAG TAACTGTGGA GATCTGAATA ATAACACAAT 21060 TCTAAGTTCC CCTACTCATA AAGCTGCTCA TCATTTAGAT GGGGTAAAGC ACCTGAAATA 21120 CAATGAGCAT CACTATTTC ATTCATCCAT GAAATGAACA TTCCGGGGAG ATCAGTAAGT 21180 TGATGTATCA CCCTTGAACA GGGCAAAATG AATACTCACC AGGAATATGT GGTATTTTAA 21240 AAAGAAGGCA AAGGGAAGAA TAGTGGGGAT GGGGCAAAAA CTTTAAATAG ATTCCCCCAA 21300 TCATATATGG CAATTGAAGA TAATTAAATT ATCATTTTAA TTGAGTAAGT ACTCATAGAG 21360 CCCTCACTAT TTGAAAATGA ACTGCCTCCT AATTGTTATT GTGCAAATGT GATACATTAA 21420 ACTTAAGCTA TTTTAATAAA ACATCCATTT TCGGAAGCTG TAGTAGGTTC TCCCAGGTCA 21480

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GATTTGATAA	GCCATAAAGA	ACAAATGCCA	ACTCCTATTT	TTCTATGGTG	CTGGGAAATA	21540
AGAGAGAAAT	GTGTAATTCA	AAGCAATCAT	TTAATTTTAT	CCAATAGCTT	GATTCTCCTC	21600
TCTCTTCTAG	CCTTTTAGCT	AAGCTGTTAC	CAAGTAACCA	CACTAGTTGG	CTTGAGTCTT	21660
ACCACTGTTT	CCCTGACCCC	ACAGTGGAGA	GACTGCATCT	GTTAAAGAGC	AGTTATGTAA	21720
CCATGGCTAT	GCTGAGCTGG	GATTCCCAAG	GCTTAGGTTC	TTTCTGTGAA	TGACCTTCAC	21780
CAAGACACCT	GAGGTCTGTG	TGGAACCACA	GGCTTGTCAT	CTCTAAGGCA	GAGTTGATAA	21840
TTCCATCTGT	TTCTTGAGCC	CACACTGAGA	AAAAGATTAC	ATGACTGCAG	TTATTTGAAT	21900
GCCTCATGGA	AAGACGTCTT	АТАААТАТТА	TAATTAATGT	TATCATTAAG	TAATGCTTCA	21960
ATGCAGATCT	TCCAAGTATA	AATATCAGCT	GAGTAAGAAG	TCAATCTTCC	CTGAAGCAAA	22020
ATTGAAATTT	GTAAATGCGA	TTTCTGGGAG	CTTATTTTGT	AATACATGAT	TCCAGAGTGT	22080
CCATAACACA	CACAATTGTC	TTTTTTCCCC	TACATGGGCT	ATTTACAACA	AAATTGGACT	22140
TATAATGTTT	ATTTCCAGGG	ATGACTAGAA	СТТТААТААС	AAACCTTGGG	CCAGGCATAG	22200
TGGCTCATGC	CTATAATCAC	AGCACTTCGG	GAGGCTGAGG	CTGGTAGATT	ACTTGAGGCC	22260
AGGAGTTTGA	GAACAGCCTG	GCCAACATGG	CAAAACCCTG	TCTCTACTAA	AAATATAAA	22320
ATTAGCCGGG	TGTGGTGGCG	CATGCCAGTA	ATCCCAGTTA	CTAAGTAGGC	TGAGGTACGA	22380
CAATCGCTGG	AACCTGGGAG	GCGGAGGTTG	CAGTGAGCTG	AGATTGCACT	ACTGCACTCC	22440
AGCCTGGGTG	ACAGAGAAAG	ACTCTGTCTC	АААААААА	АААААААТА	АТААТААТАА	22500
TAAACCCTGA	TGAAAGGTTT	CTAAAATGTT	TTCATCTAAT	GGTTTTCTTG	ACAATTAAAT	22560
ТТТСТАТАТА	ATGTCAGTTC	АТАААААААС	TGAGAACGAC	CACATGTCAT	ATCGACTGCT	22620
TAAAAGAAAA	TACGTATATT	TACAAACATA	TACACGATAC	TGTCTTTTGT	CTGGTTAGTT	22680
TAGAGGTTAG	ATAAACTGCA	GTATGTTGTA	GTGGACAGAT	CATAGAACTA	GGAGTCAGGA	22740
TGTCTGGATT	CCTAGGAAGC	AATGAATAGG	TTGCACGGTG	CAGACCAGCA	TCATGAGTAT	22800
CCTCAGGGAG	CTTGTTAGAA	CTGCAGATCC	TTTAACTCAT	TGAATCAGAA	TCCCTAGGTG	22860

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TGGGGCCCTG	AAATCTGTAT	TTTAGCAGGC	TCTCTGGGAT	TGTGATGTGC	CTTAGAGTTT	22920
GACAACCACT	GGGTAGCTGA	TCCTGACTTA	GACTTATCAG	GCATGTGATC	TTGAACAAGT	22980
CACATAATCT	CACTGAGTTC	AGTTTTCTTA	TGCTTAAAAT	AGGCCCAATA	ATATCTATTT	23040
CACATGGACT	GCTTTGAGGA	TTAGGCAAGA	GATCTGTAAC	AGACACTGTA	GAACAGTGTC	23100
TCTGGTCTAC	AGCTGACCTT	CCATAAATGG	TAGTTGCCTT	GATCTCTGCT	CTGCCACATA	23160
ATAGCTGGTT	AACTATGAGC	AAGTAATTTA	GTTCTTCTCA	GTTTAGTTTC	TTCACCTGTA	23220
AAAGAAGGAA	AATAACTGTT	ATACTCAATT	TCTGAAGTGG	СТАТАААААТ	CAGTTTAAAT	23280
TATGGGCATT	GAAGCTCTTT	GTACACTGTA	TAAGGACTGT	ACATCTAAGG	GATTAATGAG	23340
ACCAGGCTTA	TGATTTTAAG	CATGGAGTAA	ATAGTAACAC	TGACTCTGTT	CTATGAACCA	23400
CATGGAAACT	CTAAAGAATA	TGCACATTTG	AAACACAGGT	ATCATCTGGG	GAAGGTGATC	23460
TGCTCACCCA	AACCAGTTCA	TGAACATCAA	TCTCCAGTGG	CGTGCTGGAG	CTAGCTGTAC	23520
CAGCTCATGA	GGGCCAATTG	TTTCATTTTT	AGGAATTTTG	TTTGCTGGTT	AAAAATAGTC	23580
ATTATTTAAA	ATTAAATTAT	GTAAACAATA	ATATTAGATA	AAATAAGTTA	AAATAAAAAC	23640
AAAGGAACTA	ATTATCCCCA	AACTCTTCCC	CACCTAATTA	TTTTACTATC	TGTGCCTTGG	23700
GATTATTTAC	ATTGATTTTA	TCCATATGGT	GACAATACTA	ТТСАТАТАТА	AATGGTGTGC	23760
TTCTCTTCAT	AACTCTACAT	AGCCTGATGT	CAGGCTAGTA	GCTTGAAATT	GGCCACAGTG	23820
GGAGTGTGAG	CATTTGTACC	ATGAGGCTTG	GCCAAGGCTA	CAAATCCAGA	CTTTTGTTT	23880
TCCCTCCTGG	AGAGCTGTCT	GTTAAAAATT	TACCAACACA	CCACTGGTCT	TACCTTTGTT	23940
AATTTACCAC	AGTCCAGGTT	CTGACCTAGA	CTTAGAAACC	TGGATTTGTC	AGCAAGCTGA	24000
GGATAGAGCC	ATTATTTTA	AGAAGGACTC	ACATTACCCA	AGTGCAAAGC	СТСАТАТАТА	24060
CCTTCAGAAT	ATCAATTTAT	TAATTTACAG	TGAAGAAAGC	CACCCCAGGG	CATTCCCCAG	24120
GGGAAGGCAA	AAAGAGCTAG	TTGCACATTT	TGAATGTTTG	ATGACATTAG	GGTAAGGTGA	24180
CACAGAATAT	CCATTTCCAC	AACTGAGATA	CCTGCTGCCT	TAAGGAAGGG	ACAGGCAAGT	24240

CCTTGGGCAG	GACCTTAGAT	TGTCACTGTC	CATCTTGCTC	TAGGACTCTC	CTTTCCAGGC	24300			
ATGACGATGG	CCAACTCTGT	CCTCCTACCC	TACTGATGGG	ATTATCTTTT	CTTGACACAT	24360			
GGCAATGCCT	CCAATCAGAG	GCTGGTAGCT	ATTTTTAATC	TTCAGGGCAG	TATTTTTCAA	24420			
AGGGAAGTTC	ATGGACCATA	TGCATCTGTA	TCATTTAGAT	GTATATTAAA	AATGCTTAGT	24480			
CTTCCCCAGT	TATACTAGAT	CAGAATCTCT	GTTGGTGGGG	CCCACGAATC	GGTATTTTCA	24540			
ACAAATCACT	AGGTAATTTC	TGTATATACT	ATAGTGTGAA	GACCACTGCT	TGAAGGTTTC	24600			
TTTGCATATC	TCCACTAAAT	АТАААААТА	TTGACTTCTA	GATTTAACTC	CCAAAGCACT	24660			
TGCATTTTTA	AGTTTCTGGG	GGCATTATAT	TGTGGTACCC	CTATACCACT	CACACTCTAG	24720			
TCAGGAGGTA	TATTATGGAC	TGAATGTTTG	TGTCCCTCCA	AAACTCATAT	GTTGAAGTCT	24780			
TAGCTTCCAA	TGTGATAGTA	TTAGGAGATG	GTGCCTTCTG	GAGGTAAAAT	CAAGCCCTCA	24840			
TGAATGGGAT	TAGTGCCTTT	AGAAAGAGAG	CTCCGTCACT	GTCTTTCCAT	CAATTGAAGA	24900			
TGCAGTGAGA	AGCTGGTAGT	CTTGCATCTG	GAAGAGGCC	CTCACACAAC	CTGATCATGC	24960			
TGGCACCTGG	TCTCAGACTT	TCTGCCTCCA	GAACTATGAG	ATGATAAATT	TCTGTTGTTC	25020			
ATACCCCACC	CAGGCTACAA	TATTAGGTTG	CTGCAAAGTA	TTTGTGATTT	TTGCCTTTAC	25080			
TTTTCAGGGC	AAAAACTGCA	ATTACTTTTG	TGCCAACCTA	ATATTTTGTT	ATAGCAGCCC	25140			
GAACTAAGGC	AAGGGAGACT	ACATCAGACA	GTGTAGCTAT	GTAAGTACAA	ATGTATCCCT	25200			
GTTGAGGAAA	ACTAAGTTCT	AACCCTGACT	TCAGGCCAGT	AGCCACCTTT	TCAATCTCTT	25260			
TCATGAAGGG	ACCATTATCA	TTATCACTGG	TGGCAAAAAT	AGAGGCACGA	GAATGGAATT	25320			
TGCTTTTCTG	TGAAATCTCA	GTGTATACAG	ATTGAAGAGC	AAGGGTTTGC	TTTCATCTCT	25380			
AAGAAGCAAA	AGTGAGTACG	GACTGGCACA	TTATCAGAGA	AAGAATCATT	CTAGCTCGGT	25440			
GGGTCTTAAC	CAGGAGTGAA	TTTGACTCCA	GGGAACAGTT	GGCAATGTCT	GGAGACGTTT	25500			
TTATTTGTTA	TAGCTGGGGG	ATGAGTGGGT	GGGTTGCTAC	TGGCATCTAG	TGGGTGGAGA	25560			
CCAGAGATGC	TGTTAAACAT				AAAGAATTAT	25620			
SUBSTITUTE SHEET (Rule 26)									

CTGGCCCCAA	ATATCAATAG	TGCCAAAGTT	GAGAAACCTC	ATTCTAGCTT	CCTTTTCCCT	25680
TCTACGTTCT	AATCAACTGT	TGTTCTTTCA	GCATTAGGAT	TCATCCAGCA	GTCTCTTTCC	25740
CCAGCAATTT	GTTGAAATTT	TTTTAAAAAT	GGACTCATTT	TAGTGTCACA	AGAAAAAAAT	25800
ACATTCACAG	GAAAGGATGG	GTCATTTTGT	TTAATGATGT	TTTGCCTTTC	ACATAGCAAA	25860
AGCTTAATAA	AGTATTTTTA	AATAAAATGG	TGAATAGATC	AAAACATTAA	TTTCACATGT	25920
GTTTTAATAA	ATAACAGGAA	GATGGCTATA	TTATATAAAT	TGTTCTTGTA	TATGTCTTGA	25980
GTGGATCATC	AAACACAAAC	GTATCTACAT	GCCTTTTCTT	GTGAATAGAT	СТААТААТАА	26040
CGCTCTTCTA	AAAACAAATT	AAATGGATAT	TATTTGCTGA	GAATGTAATG	CTTGTGTGAA	26100
TAGAAGCCAG	CCCTGAATCC	AAGCCCCCAG	АТСТАТТТАА	AGAATTTGAA	GAATGTCAGA	26160
AAAGCACGTG	GCTTCAAGGT	TAATGTGTAA	GACTCACAGA	AACTTGAAAA	ATCACTATGA	26220
CTAAAAAGAA	AGTATGAGCT	CCCTGCATGC	CTGTAAATTG	GAATGACAGC	CAAAACCAGT	26280
TAATTATAAA	AACAGCTAAT	TTAACAGGTT	TTCAAATTTG	TTTCTTTCTC	CAAGTAGCAT	26340
ATAGTCAATA	ATCCTTAAAG	AGAAAGCAAA	GAAGGGGAAG	CACTGAACCA	AATTTGCTTT	26400
TTTGTACCTG	CTCAGCTCAA	ATGCAGAGTT	CTCTACCTGG	AAATTGACTG	CTTCCATAGT	26460
TTGATAGCCA	CAGAGAGATG	GGAACAGAAG	GAGAGGTATA	ATCCCAGACT	TGATTCAGCT	26520
ATAGAGAATG	ACAATAGTGT	CAGAGGCCTT	CCAACCAGAG	CGACTCCATC	TTGAATACGG	26580
GCTGGGTAAA	ACAGGGCTGA	GACCTAC T GG	GCTGCATTCC	CAGGAGGCTA	AGCATTCTAA	26640
GTCACAGGAT	GAGACAGGAG	GTCAGCACAA	GACCTTGCTG	ATAAAACAGG	TTGTAATAAA	26700
GAAGCCAGCC	AAAACCCACC	AAAACCAAGA	TGGCCATGAG	AGTTATCTGT	GGTTGGTCTC	26760
ACTGCTCATT	GTATGCTAAT	TATAATGTAT	TAGCATGTTA	AAAGACACTC	CCACCAGTGC	26820
TATGACAGTT	TACAGGTACA	TTGGCAACTT	CCGGAAGTTA	CCCTCTATGG	TCTAAAAAGG	26880
GGAGGAACCC	TCACCTCCCA	GAATTGCCCA	CCCCTTTCCT	GGAAAACTTG	TGAATAATTC	26940
ACCCTTGTTC	AGCATATAAT				GAAGCTCAGG	27000
		Or TO CO	THE PERSONS	(D.da 20)		

CCACTGCTCT	GAATGTGGAA	TAGCCATTCT	TTTATCCTTT	ACTTTCTTAA	TAAACTTGCT	27060
TTCACTTTAC	TGTATGGACT	CCCTGTGAAT	TCTTTCTTGC	AAGAGATCCA	AGAACTCTCT	27120
CTTGGGGTCT	GGATCAGGAC	CTCTTTCCAG	TAACAATAGT	AGTAAGGGGT	CAGGGAGACT	27180
GGACAAAGGA	GTTTAAGAAG	CCTTAGATAA	AGGGTCCTCA	TCATTGTCAT	ААСАТААААТ	27240
CATGGACTCC	TAGAATTTTA	TAGCTGATAG	GATTAGAAAT	TTCAAAATTC	AATTTCATTA	27300
ATTTTCATCT	GCGAAAACAG	ATGGCCAGAG	AGGCCAAACA	ATTTGTTAAG	GAGCACTGAG	27360
GGCAGACCAC	ACTGGAACGC	AAACCTCTTA	GCAGAGTATA	CAAGGCCTTT	GATCTCCTCA	27420
GTCAGAATGA	ACTAGAGCTT	TCCAGGGTAC	CCTTTCTGAC	TGTTTAGCAT	GTTTGCCAGT	27480
CTGACTAATT	TTGAAGTTGC	TTAAATATCT	GTCATTTCCA	CTGTATCATA	ATCTCCTCAT	27540
TCATCTTCAA	TCTCCAATGC	CTTGAACTCA	GTAAATGTTA	GTTGAACAAA	AGTAAATTGA	27600
ACCCAGAATT	TCTGATCATA	ATCTGGAGCA	СТТТААААТТ	GTCAGCTTAC	TGGGAAACGG	27660
GATAACATGT	GATTTGTCTT	TGATTTTTTT	TTTCTCATAT	GCTTTTTCCA	CCTATAGATG	27720
CTACACGAAT	GTTTTTAAAA	TCTGATATAA	AAATTAAAT	TAAAAAATTA	AAAAAAGAAA	27780
ATTTGATACA	ATGCTACATT	TAGAGTGTTG	TGATTAGATT	CCTTAAGTGT	ATCATGGTGA	27840
TCTCTACATC	ACGTGGTGAT	CAAATTGCTT	TGGGTTTTAA	CACATAACTG	ACAAAGGCTT	27900
GGGGACATGT	AAGATCCCAA	ATACATTTTT	ATTGATTTTT	TTTTCTTGTT	TGTCCTCTTT	27960
ТАААТААСТТ	TTTTTTGTTA	TAAGAATAAT	TCATGTTCAG	TGGAGAAACC	ATAGAAAATA	28020
GTGACAAGTG	AAGGAATAAA	TTTAAAATGA	CCCATAATTG	TACCATACAT	TCTGATTTTT	28080
TAAACGCTGA	ACAAATTAGC	CTTGGGTAAG	TACCAGGAAT	AGAGTGCAGC	ATTGAAAGTT	28140
AAAGTTTGGG	GAAGGATAGC	TGACTTAAGA	AATTATCTAG	TTAGACATTT	TTTGATGGGG	28200
TAATTTTGCA	GATGACATTA	GTGAGAGAAA	GGACTTGCCA	CTCTCACACA	GCTAGTAGGG	28260
GTGTGGGAGG	ATATTGGAAC	CAAGTTTCAA	GTCTTCAGTG	AAGAATCAAG	GGAGAAGTTC	28320
ТААААССТАА	CAATATCCCT				AAGCCACACG	28380
		STIRST	THITE SHEET	(KDIE 76)		

GTGAGTCATA AGGAGCATTT CATTCTTCTA ATATGTCTCT ACTGTATTTA GAATCTGATA 28440 AAGCCCCTAT TAGAATTCAT CTCTTTAAGA ATAAAAGAAG CTGAGGAACT AAAGAGAGGG 28500 TTGGAATAAT CCACTAATTA TATCCGTTAA GCTTCAGTTA CGCTAATAAG GAATATCACA 28560 TGACTGTGGT GTGTGCTTGT TCTGAACAGT AAAGTACATG AGGAAAGATA AGATTCAGGG 28620 CTGAAATGTC CTTCAGCATA TGTAGGTAGT GGTGATGAAA GTCATTAAAA GAAAAATTGA 28680 TTGAGGTATT TTAGTAAACA AAAGAACTCA CCACTTACCC ATCAGGAAGT GTATTGTTAA 28740 TGCAGTGCTG TTCAGCCTTC TGGAAGAAAA GGTTTCTTCA TGCTTCTCTC TTTAGCCTAA 28800 TTCTTATCCT GTCACTTTTC AGGCAAAATT AAAAAAAAA AAAGATTGAA AACGATGCTC 28860 CTATTTATT TGCTTCAAAA GAAACAGGCT GTTGCATTGT GCTTGGAACA GTTTACTCTT 28920 GGCCTTGATG TAAGTGTGAA AGGAAGCCCA TGTAATTGAC TAGGCAGTAT CTGAAGAAGC 28980 AGGAAATACA GTGTTAAGAA AATGAACAGG CATGAAAACC ATGGCTATTT GATAAAAGTA 29040 AATAATTTCT GCAGTTCACA TGTTCTCAGC ATATTTTCTT TGATACTGAC TTGCTTAATA 29100 TGACAATAGC AGAACCATGG TAGCTTGTAG GCATTACTTT TCTTTTAATT TCTTTTACAT 29160 TTTGAATTTA CCAGCACTCA CATTTGTATT ACTTTTGGGT TATACTGAGG ATCTATAACT 29220 TATAGATCAA ATACCTGACA TATATATGCA TTCTCTGAAG TCTTAGGGCA GAACTAGAAC 29280 ATTCTTGTGA ACATCAGTAT AAGATATTAA AATGGAAGTT TTGCCTAAGA CTGAAGACAA 29340 TAAAAATATC ATAGTCTGAA ATGAATGCCA GCACACCATA CAGGATTTAA ATATCTATAC 29400 29460 GGGGGAAATC AGTTTTACAA TTATTAAGTA TTTCACCCTT GACAAGAGTA TATATATTGG 29520 AAATCAGTTG GAGAGTATTT TCAAAGATAA ATGTTAGTGT GCTATGAATG AATCCACCCC 29580 TACCACCACT GAGGCAGGGT AGGAGAGGCC TGTGCTCCTC AAGCATAGTT GGAAAAGGAC 29640 CTCAACAAGA CCACTTCAAG AGTCTAATGT GTGGAGACTG TTGCTTAGGG AGACCTTATG 29700 GTCTAGCTTC TGACTCACAG CTAAGTCAGG GAGACAGGTT GGCTGCTCTG ATCGTGGAGT 29760

CCAAAAGATG GCCTGCACTG AAAAGCCTCA TGAGTGTTGA CTTAGGGCTA GTCTAAGAGG 29820 TCCCTGGAAG AAGAAACACT CAGTAGGAGA GAAGCTGGAG GTACCTTCAG TGCTGAATTG 29880 GAACCTAGAT TCATTCCCCC GTGGAGCAAA TTACATAGGA AAGATGCCCA GTGATGGAGA 29940 GTGGGGGTGT CTCTAACAAT TACCCACCCA CCTGCCCCCA CCCCTAAGAA AAAGAAAATC 30000 ACATACAACC AGTCAGCTGT AAACATATGC CGAGCCTAGT AAACTCAGAT ACTAAGTTAC 30060 CAGGGTACCT GGCAAGTAAG AACATTCCTG ATTCCCTTCC CTCCTCTTCC TCTTTGCCCT 30120 CCAACCTTAG TGGCTAGCAA GATGGGGAGA GGAGGAGAAG CTGTAAGTGG GGAAAAAAGA 30180 GCAGCTTTCT CTCCTTTTCA GCTGCTGGAT TCTCCCTCAT CATAGGCCTG AGCTGGGGAA 30240 TCAGGAAGAA GGATTCTTTT TAAAACTGAA GTAACGTTAT CATTTAATTT TAAAACATTT 30300 TAAATTTTGA CAATGTTGAG ATTAGATATA CTAATTATTA AACTAAGATT ATGTTTTGCA 30360 GCTTGAAGTG ATAAGAAAAA CCTCTTATCT AAGAGCATCC AGGAAAGTCG GGGGTTTCCT 30420 GAACATCCTT TTAAATCCTT TGGAAGTCAG CTTTCAGAGA GGATTTAAAG TGTAGACTGG 30480 GCCTTCAGAA ACTTGGTTAA TGTAGGGGTT TCCTATGCAG ACTTGGGGAC TATACCTTGT 30540 GTGGAAGAG GAAAATAAGA TTATCTTACA TTTTTCCCAT TCCTTTTTCA AAAAGAAAGC 30600 TCAGCTAGCA TGAAAGTTAA ATTCAAAACG TAATGGGTAT TATTTGCATA TTCAAATCTA 30660 GTGCATATCA TGTAAGTACT GAATTATGGT ATTCATTATT TCAAATGACA AGCTGGATTT 30720 TTTTTTCTTT CGAATTTCAC AAATTAATTT TCCTTGGAAC CTTTTGGTTT GGGCTTTAAG 30780 AGTTTAGGCT TTCATCACAA AGAGAGGACA GCCTTGAAGA TTAAAGTGTG TGGCTCTTCT 30840 CAAGATGTTC TTAGTCCAGC AAAGGATTCT ATGCATATTT GGGCTTCCTT CTGTCTCATA 30900 ACCTGTATTT CTTGATATTC TATTTATATT CTGTAAGATT TTTTTTTTAA AGGAAAAATT 30960 CTTCCATGGT TGAAGGACAT GTCAAAAATA GAGGATACAG TTTTATATCA AAGGAAGTTT 31020 CATGATATGA CTGTAGAAGC TCATTTGACT TAAGACACAT CATTTCCTCA TGGAAGTGTT 31080 AAACAGATCT GTACAATAAG GTTGGCAATC TTTGTGTAAA ACAGTTTTTT TTCTCCTGCT 31140 SUBSTITUTE SHEET (Rule 26)

CTAAAGAAAG	TGTATATTTC	AAAATGTGAA	TGTCAGCAGT	CAGAAAATAG	TATTTTTTTA	31200
ACTTCGTTTT	CAAAGTCCTC	AAAAACCTGT	ACCTAATCAT	GAATTTTTT	TCCCACAGAT	31260
TGTTTCTTCT	TCTCCCTCCC	AGAAACTTTG	AAGTTTTTCT	ACATGACACC	AGGACCTATG	31320
TCTTTTTTA	ATTACACAGA	AATGAAAGAA	AAAAAGTGTG	TTGTATCGTT	AACCAAATAT	31380
ATGAAATCTT	TAAGCTGTAT	TTTTATTTT	AACTTTGTTT	TGCAAAGAGG	CCATTCCCTT	31440
TGGTTAAATA	ATTTGTTATT	CACAGTTTCC	TTGTCCTCAT	ATTATCAAGG	GGAAAATTGT	31500
AGAAATTTTA	AAGGAAGCTC	TAGGCAATGT	TTTCATCCCT	GAATCTTTGG	AGAGTTATAA	31560
AAACAAACAG	ATTACTGAAC	CTGTAAGAGA	ACCAATCGTG	AAGTCATTAC	ATCTAAGCAT	31620
AAGCAAAATC	TCCTCTTGGA	TCATTAAGTT	ATAGAAGAAA	AGAAAGCCTG	CACTTTGAAA	31680
TTTAAATAAA	GCTTGGTAAC	TTGTAAGTCA	AACACGTAAA	ATTTTACAAT	TCAGGAATAT	31740
CGATAGCAGT	TGAGTTTAAT	AGACTTCTCA	CATTCCAAAT	TTAAAGCTTC	CTTCTCTGTG	31800
CTAATAGAGA	TACAATAGCA	GTAGGCGTTT	AAGAAGAATG	AATCAACAAT	ТТААААСТАТ	31860
AATGTGTTTT	TTATTCATCT	CCCTTATTCA	CATATATTTG	TTTTGTTTTG	AGAAGGAGTT	31920
CTGCTCTGTC	GCCCAGGCAG	GAGTGCTGTG	GCACGATCTC	AGCTCACCGC	AACCTCTGCC	31980
TCCCGGGTTC	AAGCGATTCT	CTTGCCTCAG	CCTCCTGAGT	AGCTGCGATT	ACAGGCGTGC	32040
GCCAGCAACC	CCGGCTAATT	TTTGTATTTT	TAGTAGAGAC	AGGGTTTCAC	CACGTTGGCC	32100
AGGTTGGTCT	CGAACCCCTG	ATCTCAAGTG	ATCAGCCCGC	CTCGGCCTCC	CAAAGTGCTG	32160
GGATTACAGG	CGTGAGCCAT	CACTTCTGGC	CCTTATTCGC	ATACAATTTA	AAAATCATCA	32220
CAGAAGGTTT	GAAAGAAGGA	AGGGGCAGAA	AATTACCTAC	TTTTCCTCTC	CCCAGCGATC	32280
TCCTTCAAAT	CTGTGCCTTT	TCCTCAGGCC	CAGGCCTCAA	TTTACTGAGC	AGTCACACCT	32340
CACAGAGGGA	GGTCTGGGCA	ATCCACTCTT	GGTCACAGGA	AAGCCATTGA	CCCTCCCACT	32400
TCCTCTCCTC	CACCTTGTTC	TCAACTCTTG	ACTTTGGGCT	TTGTTTCTGT	TCAAGTCCTA	32460
GGAACTGGTT	TCTTTTATCA				TTGCTCTCAC	32520
		CIDCT	TOTAL CITED TO	(D.) (a 34)		

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TCCCTGACTC	TTGCCTTCTG	TAACAACTGG	AGACAACTCT	TTCAAAACCA	GCTCCAAGCC	32580
CCAGACTTCT	CTCTGGGCTT	TAGTTCGTAA	GGCAGGTGCC	CTACTGAGTG	AGCCTAGATC	32640
AGACAGAAAC	ATAGCTGTTG	GCAATGATTT	AGGTGAATTT	CCTTCCATTG	TTTTTCTAAT	32700
ACCTTCTTTT	TTTTGTAAAT	ATAACCATGC	ACATACACAC	ATATTTGAAT	ATCCTGCCTT	32760
TTTATTTAAA	ATGACAATAG	GTCCGGGAGT	GGTGGCTCAT	GCCTGTAATC	CCAGCACTTT	32820
GGGAGGCCGA	GGTGGGCAAT	CACCTGAGGT	CAGGAGTTCG	AGACCAGCCT	GGCCAACATG	32880
GTGAAACTCC	ATCTCTACTA	AAAATCAAAA	ATTAGCCGGG	CATGGTGGCA	GGCTCCCAGC	32940
TACTCAGGAG	GCTGAGATGT	GAAAATCGCT	TGAACCCGGG	AGGTAGAGGT	TGCAGTGAGC	33000
TGAGATCTTG	CCATTGCACT	CCAACCTGGG	CAATAAGAGC	GAAACTCCAT	CTCATGGAAA	33060
AAAAAAAA	AAAGACAGGA	TAAACATTCT	AGATAGTCTC	TATAATGGTC	ATGATTAAGA	33120
СААТААААТА	GTCTGAAATT	GTCAATATAT	АТТААТААТА	ATTTATTTGG	CCATTCTGCC	33180
AAGTAGCAGA	CACCTGTCAT	TCTGCCCACT	CAGCACCTCT	CTTTCTTTTA	GGGAAATGCT	33240
ACCCACTCTT	TGCATGGGTT	CTGGATGGAA	CTGTTGATCA	CAGTGTTTTC	ACTCCCCATT	33300
TTGCCTCACC	AGAGGTAGAC	AGAAGACCCA	AGCCAGGCCA	GTTACACACA	ATCTTCAGAT	33360
AATTACCGTA	TTGATCACAG	TATCACCCCA	CTCAAGGCTT	GGTTGGAGAT	GAGCAGAAGA	33420
GACTAAAGCT	GGGTCATTTT	AATTAACACC	TGTACCCCAA	AGAAAGACTG	TCAATGAGGC	33480
TTTTATACCG	ACACTCCTGG	TTTCCATTCT	TCCTGATGCC	ATTCATTTGA	CGAACTACCC	33540
AATCTTTCCA	ACAGTGTCTT	TGGAAGAAAG	ATAGTCAGAA	AAGAAGATAG	AGTTGTTTTC	33600
TGTTCTTTGC	AACCAAGGAA	CTCTAAATGA	TAGACTTGTT	GCTAGGCACT	TTGGTTATTT	33660
TTATTATCTT	GAATACTTCT	GTGATATACT	TCTTTGTGCA	TGCCTGTTTG	TACGGATGTA	33720
GCTTTTTATA	ТАТТТТАТАТ	AATTTCTCAG	AAGTGGAATT	ACTTAGTCAA	AAGGTATGAA	33780
CATTTTTCTG	ATTCTTAATA	TAAATTGTGC	AAATGCTTTT	TAAGAGGATT	ATACCAGTTT	33840
ACATTTTGTG	ТТАТАТАТАА	CAGAAAGTAC	TACTGAAAAA	ATATTACAAA	AATTTGTCTC	33900
		TORITO	TTITE SHEET	(Rule 26)		

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TCTGTTCAGG AGGACCTTGT AATAGATGAT AAAGTACTTG AAATAGGAAC ATAGAGCATT 33960 TTCAGTTTAA AATAATTTCA TTGGGTTATT TACGGAATCC TTAGAATTAT GGCCAGACAT 34020 TTATAGATGA TCTGTACCAA ACCTAGGTTG GTTACATAAA TTGCTTATTC AACTGGCTTA 34080 AATCTATAAT AGAAAGATGA CACTTACTGA ATGTTTAATA TACACTTTGT CAGGGGCTTT 34140 GTATTATTCT ATGACATCTT CAAAATGACC CTACTTTCCT ATTTTATAAG TAAGGACAGG 34200 AAGGCTTCAA GAACATGACT AATTTTCCCA AGGGCTGTAC CAAAGCCAGA ACCCAAATCT 34260 ATAAGGCTTT TAAACCTGCA TTCTAAAACT GCATCTCGGC CATCTTATTC CTACAGAACT 34320 TAAGGTTAGA AAGCCAGATT GGAGTCCCAA TTTCACCACT TAGTAACCAG ACAAACTTGA 34380 GGAATTCACT CAACGTCTTT GAATCTTCAT TTTCTAATCT TTAAAACTAA AACAATAATA 34440 CTTGCTCTAC CTATGTCCTA AGATTTCGTG AGGCACATAG AGATAGTGTG GAAGAGTGCT 34500 GTACAGATGT CAAGTGTTAG CGTGATTACT TAGATCCCTG AACACCATGG ATGAATGTCT 34560 CTGACTGCTA TTAGAGGTCA TAAAGAATAT TGGGGCCAGG TACATTGGCT TATTCCTATA 34620 ATGCCAGCAC TTTGGGAGCC TGAGACAGGA GGATCACTCG AGGCCACGAG TTCAAGACCG 34680 GCCTGGGCAA CATAGTGAGA CCCCTTCTCT ACAAAAAAAA AAGCAGCCAC GTGTAGTGGC 34740 ACACACCTGT AGTCCCACAT ACTCAGGAGG GTGAGTTGGG AGGATAACTT TAGTCCAGGA 34800 GTTTCAAGGT GCAGTGAGCT GTGATTGCAC CACTGTACTC TAACCTGGAC AGCAGAGTGA 34860 GACCCTGTCT CTAAAAAAAA AGAAAAAAA ATAATAATAA TAAAGAATAA TGGGGCCTTG 34920 GGATACCCAC TCCTCTTTT CTGCTCTGAG TTGTGAAGCA GTTGAGTTAC ATATGCATGT 34980 CCAATGGATG AGGTTGAAAA TATCAACTGG ATTGGAATGT GGCTTACTTG CGTGGCCACA 35040 ATGAGCTTCG TAACACTTCC TGACAGGGTG AGAAGACAAA CTTCCTCACC CAGTCACTGG 35100 CAGAGCTGGA CACTCTGTGT CTCTCCCACA GAACAACCTC TTACTGCATG GAGGTGGATG 35160 AAAAAGTCAA CCGAGAACAG GCTACTCCAA AAAGCAGAGC ACCAAAGGCA CCAGCTGGTC 35220 AGGTCCCCCT TCCTAAGTAA ACAATCACGT AATTCATTCG GGACAAAGCC AGAGAGGTGG 35280

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TGTGGAGAAA GAGAGGGCAG TTTCCTCCCA AGTTTTTCCT GGAATTCTTT ATGGGAATAT 35340 GAGGTTTAGG GGAATAAGAC TTCCCTTTAA CAGTGAAGAA TCCCCAGCTC TATTGGTAAT 35400 AGGAAATCGC TTACAAGGAT CATGGGGAGT ATTTCCTCAG CTCGTTCTGC CTCCTACTTG 35460 GCTGAGTGGA ATGGAACCAT CTGTGGCTGC TGCATATGAT ATTGTCAACT TTGTCATTCC 35520 ACACCCACTC CTTGACGCCC TACCATGTGG TCATAAGACT CCCTTTAAAG TGTTCCTTTA 35580 35640 TTGCTCTCTG ATGTAACCCT TTCACAATGT TTGGGCAGCT TATTCTCTCT ATTTCCCTGT 35700 AGGGTCCCAT CCAGGCCAAA GTGAGTGCCA GCCTCATTTG GGCAGCAGAT GCCCTGTGGA 35760 AGGGCAGGAG GAGACGAGAG CTAATTGTAA CTTTGTGATT AGCTGTCATG GATGCCTGGT 35820 CCTGTCAATA GCGCTCAATA AAGCCAGAAG GCCAAGCGTT CGCTTCTGCA TACTGATTGC 35880 TGAGTCAGAT TTCTCAGTGC AGAAGGGCTT TCTAGGCAGT CAATTTTAGA ATATTAGTCT 35940 TGGTTCTTAA GTGGTTAAAA TCCCTAGCTG GTCTTTAATC TGAGCCTGGA GAATTTAGTT 36000 ATGGCTGACA TTCTGCTGTG ATATTTTTGC CCTCAATATA TATGTCTTTC CTCCATCTCT 36060 TAGATCCCTG AATCATAGAG ATATATATGT TATATAATCA ACTGTCTCCA GTCTCTAAGA 36120 GTGATAAGTA CACATTGTGT CAGGTTGAGG GGACAGGAGA ACTTTCAAAA GCCTTTCTTG 36180 CCCCTTTTTC CTTCTCACTG CCTCCCACTA AGTCCAGCCA CTTATTATTC AGCTGACACT 36240 ATCATCATGA CCATGAGGTC TTTTGGGGCT ACCCTGGTTC GGATCCTTCT GGAGGTTTGT 36300 TGCTTAACTC TGTCTTCAGT CCTATGAGCT GCTTTTTCAA TAAGTTTCTA TTTTGGCTAA 36360 AGTTGGCCAG AATCTCCTTG TAACCAAAGA ACAAATAAAA TACCAGCTTG CAATGTTCTA 36420 TGTTGCTTCC ACCAAACTTA TGCAGCACTT CCTATCTAAT CCACCTACTA GTCTTTTTTT 36480 TTTTTATTTT TTTTGAGACG GAGTCTCGCT CTGTTGCTCA GGATGGAGTG CAATGGTGCA 36540 ATCTCGGCTC ACTGCAACCT CTGCCTCCCG GGTTCAAGCA ATTCCCCGGC CTCAGCCTCC 36600 TGAGTAGCTG GGACTACAGG TGCATGCCAC CACGTCCGGC TAATTTTTGT ATTTTAGGAG 36660

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AGAGAGGGTT TCACCATGTT GCCCAGGCTG GTCACGAACT CCTGAGCTCA GGCAATCCGC 36720 CCTCCTCGGG CTCCCAAAGT GCTGGGATTA CAGGAGTGAG CCACCTCACC TGGCCCCGAC 36780 CTACTAGTCT TTAGTGTTTG CTTCCTTCTA TTGGGTAATT GTCTGTTTAT ATGCATGTCT 36840 TGTTTCCTCA AATAAAATGT GGTCTTCTCA AGGGTATTGG CCCATGTTCT ATCCATCTGT 36900 AGATATCACA GCACCTAGCA GTGTCTTTCA CAGAGGAAGT ACACAACTGG CATTATTGAT 36960 TCATTGCTCC ATTTTTTCCT TCTTTATCCC CAGCATTTCT CAATAATTTC AAACATCTCC 37020 ATTGGAGTAC CGGAGAAAGC AGGTAGCTTT ACTTGCAGCT ATGTTTCTAT CCCCATAGTA 37080 ACTAAAAGAG GACCCAGAGA AACATGTTTA AATGCTGTCC TGTTATCAGG ACCTCAGCCT 37140 TCTGATGCTC CGTGGCTTGG GGGTTATTGC TTGATCATCT CCTCCCCAAC CTACACTGTG 37200 TACCTATGCT AGTCTCTTCA TGAGGACTAA GCCCCATAGT AAAAGGGCTA GATAAATAGA 37260 AAATCATTTT ATGTAATTAT AAGAATGAGA ATACTGAGTA TTCTGGTGTT TGTTTAGGAT 37320 AAGCACATCT TTATTTGTAT GAGAAAAAGA AAAAGAGAGT GAAAAATATA TTAACGTGCA 37380 TATTGTTCAG AACCCTTGGA TTGCAAGTGA CAGAAACTCA ATTCAAACCA ACGTAAGTCA 37440 AAAGGAAAAT ATATTGGCTC ATGTAACCTT CTCACAGAGA GGGCAGGATG GAAGGGGCTT 37500 TGGGAACAAG AGAATTGTTC TCAAATTCTA GGAATACTAG GATTAGTCCA GGATGGGTCA 37560 CCTTCCTGTC CCTGAGGTGG TGGTAGCGAT GGTAGAGTCT TATGGGAGGA AAGAGTGCAT 37620 GTTAGGATGA AGGTAGGGCT AAGCAAACAA GGGCAAGGGC CACTATATCA TGCTAAAAAT 37680 GGTTTTTTTT GATGTCTTCC TTAATTTCAC AAATGCTTCC AACAAGTAG CACACAGGAA 37740 AAAGAACATA GGGACTCTAC TGGTGGGTGC TTTTATCTTA AGCCTTGTAC TTGCTTTTCA 37800 CAGCTTACTC ACTGCTTGTA CCTGAGGCCA TATGCCCTGT AAAAGCTTCT GCAGGGTTTC 37860 TACTAAGCTG GGTTCCTTAT ATGGCTCTCT CCCATTTCTG TTGCCTCACT CTAGTGATCT 37920 TTCTCTTTTC CTCACCTCTG GGACTGGTGG CTGTTTGTAT GGACTGCCTT AGCTTTGCTT 37980 TGGGTTTTTT CCTGGGGACA ATGTCTTCAG ATTATCCTAG ACCAAATAAA CTACAGCCAC 38040

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TGGGCCAGGC TCTTCCTCCT CCAACTGGAC CATGTTCCCA GGGCTCTTCA CCTTAGTTTA 38100 GGTCAAGCAT TCTTGGCAAA AGAAAGGCCT AGTTAACAAT AGACATTCTA GCAATTGATT CTTTTTGACA TGTTGTAAGA TCTATTCACA TTTTGTAATT AAAGCATTCC CCTATGGAAA 38220 CCAACACGAA CTAAGCTGCT CCTGGAATGC AGGGTGGCCT CCTCAATACA GGATGTTCTA 38280 GAGAGCTGTA TTTTGGGCAC TTAACTATTC TCCACTACTT AGGGCACAGC ACTGAAATTA 38340 ACACCACTAA GTTTGTCATG TCCATGTAGT TAGTCTCAGG CAGTGCAGCC TCAGGAGTGG 38400 AACTGACCTC TTATGTGTGT CCAGCCTTTC TTCCTTCAGA AGTCAGCTGT GTTTTCTGCT 38460 GACTCTCCAT AGGAACATCA GTCCTGAATC CTCAGACCAC CATCTGGAGT AGTAAGTGCT 38520 CCTGACAGTC CTAGAAGTTG TCTACCGCTG GATCTCCAAA GCGTGTGACA CACCGTGAGA GAGAAATGAG AAAGCTGGGC TCTTCAGGTA AATCTTGCTT TTTCACAAGC CCCCTAATTT 38640 TACTGCATAA TTATTTTGAA TTCACTGATA ATTTCTACAA TTTTCCCATA AGTCATCTAC 38700 ACACAATACC CTCTCATGCA ACACTTGGCT TTGCTAATAC ATATCTATTA TGAGAGCTGT 38760 GCTTCTTAAG CGTAAATGTT TTATATGCAC TAAGGCTCTT GGCTTACATA TAAAAGGGGT 38820 ATTGAGCAAT GTGATACAGA AGTCTTTTCT CCACAGGTCT CATATGTAAA GAATTCATTA 38880 GATTGGCTGA AATAGACTGA TCTGTCCATT TCTCTGCTCA CTTATCATAA GGAAGTCATT 38940 AGCTAAGGAA CAAAAACTAC AATCTATGTA ATTAGAAGAA CAAGCTGGTT TTGCTCAATA 39000 TAAAAATAAG AAAAAGAAAC CATGTGAAAG TCAAAATATT TGTTTAATCA GGTCATTGAG 39060 AATCTATTAA AAAGTATTTG AATTCTTTAT GATGAGAACT ATCTTGACTC AAGTGGACAG 39120 TGGTGAGCTT TTTGGCCTGT GGTCCCTACG TAGAAAGGAG GCTTTGTCAT AAAGTCTTAT 39180 ATGGTACAGG TGCCAAGTTA AGTGCCCAAG CTTGCTCTTA AAAGCATACT GGATTTTG 39238

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(2) INFORMATION FOR SEQ ID NO:5:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 5596 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

TATGGACATA	TTGTCGTTAG	AACGCGGCTA	CAATTAATAC	ATAACCTTAT	GTATCATACA	60		
CATACGATTT	AGGTGACACT	ATAGAACCAG	ATCTGATATC	GAATGAATTC	TTTCTTGCAA	120		
GAGATCCAAG	AACTCTCTCT	TGGGGTCTGG	ATCAGGACCT	CTTTCCAGTA	ACAATAGTAG	180		
TAAGGGGTCA	GGGAGACTGG	ACAAAGGAGT	TTAAGAAGCC	TTAGATAAAG	GGTCCTCATC	240		
ATTGTCATAA	CATAAAATCA	TGGACTCCTA	GAATTTTATA	GCTGATAGGA	TTAGAAATTT	300		
CAAAATTCAA	TTTCATTAAT	TTTCATCTGC	GAAAACAGAT	GGCCAGAGAG	GCCAAACAAT	360		
TTGTTAAGGA	GCACTGAGGG	CAGACCACAC	TGGAACGCAA	ACCTCTTAGC	AGAGTATACA	420		
AGGCCTTTGA	TCTCCTCAGT	CAGAATGAAC	TAGAGCTTTC	CAGGGTACCC	TTTCTGACTG	480		
TTTAGCATGT	TTGCCAGTCT	GACTAATTTT	GAAGTTGCTT	AAATATCTGT	CATTTCCACT	540		
GTATCATAAT	CTCCTCATTC	ATCTTCAATC	TCCAATGCCT	TGAACTCAGT	AAATGTTART	600		
TGAACAAAAG	TAAATTGAAC	CCAGAATTTC	TGATCATAAT	CTGGAGCACT	TTAAAATTGT	660		
CAGCTTACTG	GGAAACGGGA	TAACATGTGA	TTTGTCTTTG	ATTTTTTTT	TCTCATATGC	720		
TTTTTCCACC	TATAGATGCT	ACACGAATGT	TTTTAAAATC	TGATATAAAA	АТТААААТТА	780		
AAAAATTAAA	AAAAGAAAAT	TTGATACAAT	GCTACATTTA	GAGTGTTGTG	ATTAGATTCC	840		
TTAAGTGTAT	CATGGTGATC	TCTACATCAC	GTGGTGATCA	AATTGCTTTG	GGTTTTAACA	900		
CATAACTGAC	AAAGGCTTGG	GGACATGTAA	GATCCCAAAT	ACATTTTTAT	TGATTTTTT	960		
TTCTKGTTTG	TCCTCTTTTA	AATAACTTTT	TTTTGTTATA	AGAATAATTC	ATGTTCAGTG	1020		
SUBSTITUTE SHEET (Rule 26)								

GAGAAACCAT	AGAAAATAGT	GACAAGTGAA	GGAATAAATT	TAAAATGACC	CATAATTGTA	1080
CCATACATTC	TGATTTTTTA	AACGCTGAAC	AAATTAGCCT	TGGGTAAGTA	CCAGGAATAG	1140
AGTGCAGCAT	TGAAAGTTAA	AGTTTGGGGA	AGGATAGCTG	ACTTAAGAAA	TTATCTAGTT	1200
AGACATTTTT	TGGATGGGGT	AATTTTGCAG	ATGACATTAG	TGAGAGAAAG	GACTTGCCAC	1260
TCTCACACAG	CTAGTAGGGG	TGTGGGAGGA	TATTGGAACC	AAGTTTCAAG	TCTTCAGTGA	1320
AGAATCAAGG	GAGAAGTTCT	AAAACCTAAC	AATATCCCTC	TGGATGGACA	TTTATTTTAT	1380
TACTACAATA	AGCCACACGG	TGAGTCATAA	GGAGCATTTC	ATTCTTCTAA	TATGTCTCTA	1440
CTGTATTTAG	AATCTGATAA	AGCCCCTATT	AGAATTCATC	TCTTŢAAGAA	TAAAAGAAGC	1500
TGAGGAACTA	AAGAGAGGGT	TGGAATAATC	САСТААТТАТ	ATCCGTTAAG	CTTCAGTTAC	1560
GCTAATAAGG	AATATCACAT	GACTGTGGTG	TGTGCTTGTT	CTGAACAGTA	AAGTACATGA	1620
GGAAAGATAA	GATTCAGGGC	TGAAATGTCC	TTCAGCATAT	GTAGGTAGTG	GTGATGAAAG	1680
TCATTAAAAG	AAAAATTGAT	TGAGGTATTT	TAGTAAACAA	AAGAACTCAC	CACTTACCCA	1740
TCAGGAAGTG	TATTGTTAAT	GCAGTGCTGT	TCAGCCTTCT	GGAAGAAAG	GTTTCTTCAT	1800
GCTTCTCTCT	TTAGCCTAAT	TCTTATCCTG	TCACTTTTCA	GGCAAAATTA	АААААААА	1860
AAGATTGAAA	ACGATGCTCC	TATTTTATTT	GCTTCAAAAG	AAACAGGCTG	TTGCATTGTG	1920
CTTGGAACAG	TTTACTCTTG	GCCTTGATGT	AAGTGTGAAA	GGAAGCCCAT	GTAATTGACT	1980
AGGCAGTATC	TGAAGAAGCA	GGAAATACAG	TGTTAAGAAA	ATGAACAGGC	ATGAAAACCA	2040
TGGCTATTTG	ATAAAAGTAA	ATAATTTCTG	CAGTTCACAT	GTTCTCAGCA	TATTTTCTTT	2100
GATACTGACT	TGCTTAATAT	GACAATAGCA	GAACCATGGT	AGCTTGTAGG	CATTACTTTT	2160
CTTTTAATTT	CTTTTACATT	TTGAATTTAC	CAGCACTCAC	ATTTGTATTA	CTTTTGGGTT	2220
ATACTGAGGA	TCTATAACTT	ATAGATCAAA	TACCTGACAT	ATATATGCAT	TCTCTGAAGT	2280
CTTAGGGCAG	AACTAGAACA	TTCTTGTGAA	CATCAGTATA	AGATATTAAA	ATGGAAGTTT	2340
TGCCTAAGAC	TGAAGACAAT	AAAAATATCA	TAGTCTGAAA	TGAATGCCAG	CACACCATAC	2400
SUBSTITUTE SHEET (Rule 26)						

AGGATTTAAA	TATCTATACA	TATATATGTG	TGTGTATTAT	ATATATTTAA	TATATATCTG	2460
TGTGGGATAG	GAAGAGGTAG	GGGGAAATCA	GTTTTACAAT	TATTAAGTAT	TTCACCCTTG	2520
ACAAGAGTAT	ATATATTGGA	AATCAGTTGG	AGAGTATTTT	CAAAGATAAA	TGTTAGTGTG	2580
CTATGAATGA	ATCCACCCCT	ACCACCACTG	AGGCAGGGTA	GGAGAGGCCT	GTGCTCCTCA	2640
AGCATAGTTG	GAAAAGGACC	TCAACAAGAC	CACTTCAAGA	GTCTAATGTG	TGGAGACTGT	2700
TGCTTAGGGA	GACCTTATGG	TCTAGCTTCT	GACTCACAGC	TAAGTCAGGG	AGACAGGTTG	2760
GCTGCTCTGA	TCGTGGAGTC	CAAAAGATGG	CCTGCACTGA	AAAGCCTCAT	GAGTGTTGAC	2820
TTAGGGCTAG	TCTAAGAGGT	CCCTGGAAGA	AGAAACACTC	AGTAGGAGAG	AAGCTGGAGG	2880
TACCTTCAGT	GCTGAATTGG	AACCTAGATT	CATTCCCCCG	TGGAGCAAAT	TACATAGGAA	2940
AGATGCCCAG	TGATGGAGAG	TGGGGGTGTC	TCTAACAATT	ACCCACCCAC	CTGCCCCCAC	3000
CCCTAAGAAA	AAGAAAATCA	CATACAACCA	GTCAGCTGTA	AACATATGCC	GAGCCTAGTA	3060
AACTCAGATA	CTAAGTTACC	AGGGTACCTG	GCAAGTAAGA	ACATTCCTGA	TTCCCTTCCC	3120
TCCTCTTCCT	CTTTGCCCTC	CAACCTTAGT	GGCTAGCAAG	ATGGGGAGAG	GAGGAGAAGC	3180
TGTAAGTGGG	GAAAAAAGAG	CAGCTTTCTC	TCCTTTTCAG	CTGCTGGATT	CTCCCTCATC	3240
ATAGGCCTGA	GCTGGGGAAT	CAGGAAGAAG	GATTCTTTTT	AAAACTGAAG	TAACGTTATC	3300
ATTTAATTTT	AAAACATTTT	AAATTTTGAC	AATGTTGAGA	TTAGATATAC	TAATTATTAA	3360
ACTAAGATTA	TGTTTTGCAG	CTTGAAGTGA	TAAGAAAAAC	CTCTTATCTA	AGAGCATCCA	3420
GGAAAGTCGG	GGGTTTCCTG	AACATCCTTT	TAAATCCTTT	GGAAGTCAGC	TTTCAGAGAG	3480
GATTTAAAGT	GTAGACTGGG	CCTTCAGAAA	CTTGGTTAAT	GTAGGGGTTT	CCTATGCAGA	3540
CTTGGGGACT	ATACCTTGTG	TGGAAGAGAG	AAAATAAGAT	TATCTTACAT	TTTTCCCATT	3600
CCTTTTTCAA	AAAGAAAGCT	CAGCTAGCAT	GAAAGTTAAA	TTCAAAACGT	AATGGGTATT	3660
ATTTGCATAT	TCAAATCTAG	TGCATATCAT	GTAAGTACTG	AATTATGGTA	TTCATTATTT	3720
CAAATGACAA	GCTGGATTTT	TTTTTCTTTC	GAATTTCACA	AATTAATTT	CCTTGGAACC	3780
		SUBST	TITUTE SHEET	(Rule 26)		

TTTTGGTTTG	GGCTTTAAGA	GTTTAGGCTT	TCATCACAAA	GAGAGGACAG	CCTTGAAGAT	3840
TAAAGTGTGT	GGCTCTTCTC	AAGATGTTCT	TAGTCCAGCA	AAGGATTCTA	TGCATATTTG	3900
GGCTTCCTTC	TGTCTCATAA	CCTGTATTTC	TTGATATTCT	ATTTATATTC	TGTAAGATTT	3960
ТТТТТТТААА	GGAAAAATTC	TTCCATGGTT	GAAGGACATG	TCAAAAATAG	AGGATACAGT	4020
TTTATATCAA	AGGAAGTTTC	ATGATATGAC	TGTAGAAGCT	CATTTGACTT	AAGACACATC	4080
ATTTCCTCAT	GGAAGTGTTA	AACAGATCTG	TACAATAAGG	TTGGCAATCT	TTGTGTAAAA	4140
CAGTTTTTTT	TCTCCTGCTC	TAAAGAAAGT	GTATATTTCA	AAATGTGAAT	GTCAGCAGTC	4200
AGAAAATAGT	ATTTTTTAA	CTTCGTTTTC	AAAGTCCTCA	AAAACCTGTA	CCTAATCATG	4260
AATTTTTTT	CCCACAGATT	GTTTCTTCTT	CTCCCTCCCA	GAAACTTTGA	AGTTTTTCTA	4320
CATGACACCA	GGACCTATGT	CTTTTTTTAA	TTACACAGAA	ATGAAAGAAA	AAAAGTGTGT	4380
TGTATCGTTA	ACCAAATATA	TGAAATCTTT	AAGCTGTATT	TTTATTTTTA	ACTTTGTTTT	4440
GCAAAGAGGC	CATTCCCTTT	GGTTAAATAA	TTTGTTATTC	ACAGTTTCCT	TGTCCTCATA	4500
TTATCAAGGG	GAAAATTGTA	GAAATTTTAA	AGGAAGCTCT	AGGCAATGTT	TTCATCCCTG	4560
AATCTTTGGA	GAGTTATAAA	AACAAACAGA	TTACTGAACC	TGTAAGAGAA	CCAATCGTGA	4620
AGTCATTACA	TCTAAGCATA	AGCAAAATCT	CCTCTTGGAT	CATTAAGTTA	TAGAAGAAAA	4680
GAAAGCCTGC	ACTTTGAAAT	TTAAATAAAG	CTTGGTAACT	TGTAAGTCAA	ACACGTAAAA	4740
ТТТТАСААТТ	CAGGAATATC	GATAGCAGTT	GAGTTTAATA	GACTTCTCAC	ATTCCAAATT	4800
TAAAGCTTCC	TTCTCTGTGC	TAATAGAGAT	ACAATAGCAG	TAGGCGTTTA	AGAAGAATGA	4860
ATCAACAATT	ТААААСТАТА	ATGTGTTTTT	TATTCATCTC	CCTTATTCAC	ATATATTTGT	4920
TTTGTTTTGA	GAAGGAGTTC	TGCTCTGTCG	CCCAGGCAGG	AGTGCTGTGG	CACGATCTCA	4980
GCTCACCGCA	ACCTCTGCCT	CCCGGGTTCA	AGCGATTCTC	TTGCCTCAGC	CTCCTGAGTA	5040
GCTGCGATTA	CAGGCGTGCG	CCAGCAACCC	CGGCTAATTT	TTGTATTTT	AGTAGAGACA	5100
GGGTTTCACC	ACGTTGGCCA				TCAGCCCGCC	5160
		CITECT	riti ite sheet	(Rule 26)		

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TCGGCCTCCC AAAGTGCTGG GATTACAGGC GTGAGCCATC ACTTCTGGCC CTTATTCGCA 5220 TACAATTTAA AAATCATCAC AGAAGGTTTG AAAGAAGGAA GGGGCAGAAA ATTACCTACT 5280 TTTCCTCTCC CCAGCGATCT CCTTCAAATC TGTGCCTTTT CCTCAGGCCC AGGCCTCAAT 5340 TTACTGAGCA GTCACACCTC ACAGAGGGAG GTCTGGGCAA TCCACTCTTG GTCACAGGAA 5400 AGCCATTGAC CCTCCCACTT CCTCTCCTCC ACCTTGTTCT CAACTCTTGA CTTTGGGCTT 5460 TGTTTCTGTT CAAGTCCTAG GAACTGGTTT CTTTTATCAG GTTAAGTGAT TAGTTCTCTT 5520 TCCCTCTAGT TGCTCTCACT CCCTGACTCG GGGGATCCAC TAGTTCTAGA GCGGCCGCCA 5580 CCGCGTGGAC TCACAG 5596

(2) INFORMATION FOR SEQ ID NO:6:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 18443 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

GAGGGCGGGA ACCCCCTTTC CAAAAAAAA GAAACAAAGA CAGGATAAAC ATTCTAGATA 60 GTCTCTATAA TGGTCATGAT TAAGACAATA AAATAGTCTG AAATTGTCAA TATATATTAA 120 TAATAATTTA TTTGGCCATT CTGCCAAGTA GCAGACACCT GTCATTCTGC CCACTCAGCA 180 CCTCTCTTTC TTTTAGGGAA ATGCTACCCA CTCTTTGCAT GGGTTCTGGA TGGAACTGTT 240 GATCACAGTG TTTTCACTCC CCATTTTGCC TCACCAGAGG TAGACAGAAG ACCCAAGCCA 300 GGCCAGTTAC ACACAATCTT CAGATAATTA CCGTATTGAT CACAGTATCA CCCCACTCAA 360 GGCTTGGTTG GAGATGAGCA GAAGAGACTA AAGCTGGGTC ATTTTAATTA ACACCTGTAC 420 CCCAAAGAAA GACTGTCAAT GAGGCTTTTA TACCGACACT CCTGGTTTCC ATTCTTCCTG 480 ATGCCATTCA TTTGACGAAC TACCCAATCT TTCCAACAGT GTCTTTGGAA GAAAGATAGT 540 SUBSTITUTE SHEET (Rule 26)

CAGAAAAGAA	GATAGAGTTG	TTTTCTGTTC	TTTGCAACCA	AGGAACTCTA	AATGATAGAC	600
TTGTTGCTAG	GCACTTTGGT	TATTTTTATT	ATCTTGAATA	CTTCTGTGAT	ATACTTCTTT	660
GTGCATGCCT	GTTTGTACGG	ATGTAGCTTT	TTATATATTT	TATATATTT	CTCAGAAGTG	720
GAATTACTTA	GTCAAAAGGT	ATGAACATTT	TTCTGATTCT	ТААТАТАААТ	TGTGCAAATG	780
CTTTTTAAGA	GGATTATACC	AGTTTACATT	TTGTGTTATA	TATAACAGAA	AGTACTACTG	840
ТТАТААААА	ACAAAAATTT	GTCTCTCTGT	TCAGGAGGAC	CTTGTAATAG	ATGATAAAGT	900
ACTTGAAATA	GGAACATAGA	GCATTTTCAG	TTTAAAATAA	TTTCATTGGG	TTATTTACGG	960
AATCCTTAGA	ATTATGGCCA	GACATTTATA	GATGATCTGT	АССАААССТА	GGTTGGTTAC	1020
ATAAATTGCT	TATTCAACTG	GCTTAAATCT	ATAATAGAAA	GATGACACTT	ACTGAATGTT	1080
TAATATACAC	TTTGTCAGGG	GCTTTGTATT	ATTCTATGAC	ATCTTCAAAA	TGACCCTACT	1140
TTCCTATTTT	ATAAGTAAGG	ACAGGAAGGC	TTCAAGAACA	TGACTAATTT	TCCCAAGGGC	1200
TGTACCAAAG	CCAGAACCCA	AATCTATAAG	GCTTTTAAAC	CTGCATTCTA	AAACTGCATC	1260
TCGGCCATCT	TATTCCTACA	GAACTTAAGG	TTAGAAAGCC	AGATTGGAGT	CCCAATTTCA	1320
CCACTTAGTA	ACCAGACAAA	CTTGAGGAAT	TCACTCAACG	TCTTTGAATC	TTCATTTTCT	1380
AATCTTTAAA	ACTAAAACAA	TAATACTTGC	TCTACCTATG	TCCTAAGATT	TCGTGAGGCA	1440
CATAGAGATA	GTGTGGAAGA	GTGCTGTACA	GATGTCAAGT	GTTAGCGTGA	TTACTTAGAT	1500
CCCTGAACAC	CATGGATGAA	TGTCTCTGAC	TGCTATTAGA	GGTCATAAAG	AATATTGGGG	1560
CCAGGTACAT	TGGCTTATTC	CTATAATGCC	AGCACTTTGG	GAGCCTGAGA	CAGGAGGATC	1620
ACTCGAGGCC	ACGAGTTCAA	GACCGGCCTG	GGCAACATAG	TGAGACCCCT	TCTCTACAAA	1680
AAAAAAAGCA	GCCACGTGTA	GTGGCACACA	CCTGTAGTCC	CACATACTCA	GGAGGGTGAG	1740
TTGGGAGGAT	AACTTTAGTC	CAGGAGTTTC	AAGGTGCAGT	GAGCTGTGAT	TGCACCACTG	1800
TACTCTAACC	TGGACAGCAG	AGTGAGACCC	TGTCTCTAAA	AAAAAAGAAA	AAAAAATAAT	1860
AATAATAAAG	AATAATGGGG	· CCTTGGGATA	CCCACTCCTC	TCTTTCTGCT	CTGAGTTGTG	1920
		CT TD CT	COLUMN COLUMN	(D. 1- 2C)		

AAGCAGTTGA	GTTACATATG	CATGTCCAAT	GGATGAGGTT	GAAAATATCA	ACTGGATTGG	1980
AATGTGGCTT	ACTTGCGTGG	CCACAATGAG	CTTCGTAACA	CTTCCTGACA	GGGTGAGAAG	2040
ACAAACTTCC	TCACCCAGTC	ACTGGCAGAG	CTGGACACTC	TGTGTCTCTC	CCACAGAACA	2100
ACCTCTTACT	GCATGGAGGT	GGATGAAAAA	GTCAACCGAG	AACAGGCTAC	TCCAAAAAGC	2160
AGAGCACCAA	AGGCACCAGC	TGGTCAGGTC	CCCCTTCCTA	AGTAAACAAT	CACGTAATTC	2220
ATTCGGGACA	AAGCCAGAGA	GGTGGTGTGG	AGAAAGAGAG	GGCAGTTTCC	TCCCAAGTTT	2280
TTCCTGGAAT	TCTTTATGGG	AATATGAGGT	TTAGGGGAAT	AAGACTTCCC	TTTAACAGTG	2340
AAGAATCCCC	AGCTCTATTG	GTAATAGGAA	ATCGCTTACA	AGGATCATGG	GGAGTATTTC	2400
CTCAGCTCGT	TCTGCCTCCT	ACTTGGCTGA	GTGGAATGGA	ACCATCTGTG	GCTGCTGCAT	2460
ATGATATTGT	CAACTTTGTC	ATTCCACACC	CACTCCTTGA	CGCCCTACCA	TGTGGTCATA	2520
AGACTCCCTT	TAAAGTGTTC	CTTTAAAAAA	CAAAATGTGT	TTTGTTTCTA	TAAAATACAG	2580
CTCAATGTCA	GAACCCTTGT	CTTGTTTGCT	CTCTGATGTA	ACCCTTTCAC	AATGTTTGGG	2640
CAGCTTATTC	TCTCTATTTC	CCTGTAGGGT	CCCATCCAGG	CCAAAGTGAG	TGCCAGCCTC	2700
ATTTGGGCAG	CAGATGCCCT	GTGGAAGGGC	AGGAGGAGAC	GAGAGCTAAT	TGTAACTTTG	2760
TGATTAGCTG	TCATGGATGC	CTGGTCCTGT	CAATAGCGCT	CAATAAAGCC	AGAAGGCCAA	2820
GCGTTCGCTT	CTGCATACTG	ATTGCTGAGT	CAGATTTCTC	AGTGCAGAAG	GGCTTTCTAG	2880
GCAGTCAATT	TTAGAATATT	AGTCTTGGTT	CTTAAGTGGT	TAAAATCCCT	AGCTGGTCTT	2940
TAATCTGAGC	CTGGAGAATT	TAGTTATGGC	TGACATTCTG	CTGTGATATT	TTTGCCCTCA	3000
ATATATATGT	CTTTCCTCCA	TCTCTTAGAT	CCCTGAATCA	TAGAGATATA	TATGTTATAT	3060
AATCAACTGT	CTCCAGTCTC	TAAGAGTGAT	AAGTACACAT	TGTGTCAGGT	TGAGGGGACA	3120
GGAGAACTTT	CAAAAGCCTT	TCTTGCCCCT	TTTTCCTTCT	CACTGCCTCC	CACTAAGTCC	3180
AGCCACTTAT	TATTCAGCTG	ACACTATCAT	CATGACCATG	AGGTCTTTTG	GGGCTACCCT	3240
GGTTCGGATC	CTTCTGGAGG	TTTGTTGCTT	AACTCTGTCT	TCAGTCCTAT	GAGCTGCTTT	3300

TTCAATAAGT	TTCTATTTTG	GCTAAAGTTG	GCCAGAATCT	CCTTGTAACC	AAAGAACAAA	3360
таааатасса	GCTTGCAATG	TTCTATGTTG	CTTCCACCAA	ACTTATGCAG	CACTTCCTAT	3420
CTAATCCACC	TACTAGTCTT	TTTTTTTTT	ATTTTTTTG	AGACGGAGTC	TCGCTCTGTT	3480
GCTCAGGATG	GAGTGCAATG	GTGCAATCTC	GGCTCACTGC	AACCTCTGCC	TCCCGGGTTC	3540
AAGCAATTCC	CCGGCCTCAG	CCTCCTGAGT	AGCTGGGACT	ACAGGTGCAT	GCCACCACGT	3600
CCGGCTAATT	TTTGTATTTT	AGGAGAGAGA	GGGTTTCACC	ATGTTGCCCA	GGCTGGTCAC	3660
GAACTCCTGA	GCTCAGGCAA	TCCGCCCTCC	TCGGGCTCCC	AAAGTGCTGG	GATTACAGGA	3720
GTGAGCCACC	TCACCTGGCC	CCGACCTACT	AGTCTTTAGT	GTTTGCTTCC	TTCTATTGGG	3780
TAATTGTCTG	TTTATATGCA	TGTCTTGTTT	CCTCAAATAA	AATGTGGTCT	TCTCAAGGGT	3840
ATTGGCCCAT	GTTCTATCCA	TCTGTAGATA	TCACAGCACC	TAGCAGTGTC	TTTCACAGAG	3900
GAAGTACACA	ACTGGCATTA	TTGATTCATT	GCTCCATTTT	TTCCTTCTTT	ATCCCCAGCA	3960
TTTCTCAATA	ATTTCAAACA	TCTCCATTGG	AGTACCGGAG	AAAGCAGGTA	GCTTTACTTG	4020
CAGCTATGTT	TCTATCCCCA	TAGTAACTAA	AAGAGGACCC	AGAGAAACAT	GTTTAAATGC	4080
TGTCCTGTTA	TCAGGACCTC	AGCCTTCTGA	TGCTCCGTGG	CTTGGGGGTT	ATTGCTTGAT	4140
CATCTCCTCC	CCAACCTACA	CTGTGTACCT	ATGCTAGTCT	CTTCATGAGG	ACTAAGCCCC	4200
ATAGTAAAAG	GGCTAGATAA	ATAGAAAATC	ATTTTATGTA	ATTATAAGAA	TGAGAATACT	4260
GAGTATTCTG	GTGTTTGTTT	AGGATAAGCA	CATCTTTATT	TGTATGAGAA	AAAGAAAAAG	4320
AGAGTGAAAA	АТАТАТТААС	GTGCATATTG	TTCAGAACCC	TTGGATTGCA	AGTGACAGAA	4380
ACTCAATTCA	AACCAACGTA	AGTCAAAAGG	ААААТАТАТТ	GGCTCATGTA	ACCTTCTCAC	4440
AGAGAGGGCA	GGATGGAAGG	GGCTTTGGGA	ACAAGAGAAT	TGTTCTCAAA	TTCTAGGAAT	4500
ACTAGGATTA	GTCCAGGATG	GGTCACCTTC	CTGTCCCTGA	GGTGGTGGTA	GCGATGGTAG	4560
AGTCTTATGG	GAGGAAAGAG	TGCATGTTAG	GATGAAGGTA	GGGCTAAGCA	AACAAGGGCA	4620
AGGGCCACTA	TATCATGCTA	AAAATGGTTT	TTTTTGATGT	СТТССТТААТ	TTCACAAATG	4680

CTTCCAACAA	AGTAGCACAC	AGGAAAAAGA	ACATAGGGAC	TCTACTGGTG	GGTGCTTTTA	4740
TCTTAAGCCT	TGTACTTGCT	TTTCACAGCT	TACTCACTGC	TTGTACCTGA	GGCCATATGC	4800
CCTGTAAAAG	CTTCTGCAGG	GTTTCTACTA	AGCTGGGTTC	CTTATATGGC	TCTCTCCCAT	4860
TTCTGTTGCC	TCACTCTAGT	GATCTTTCTC	TTTTCCTCAC	CTCTGGGACT	GGTGGCTGTT	4920
TGTATGGACT	GCCTTAGCTT	TGCTTTGGGT	TTTTTCCTGG	GGACAATGTC	TTCAGATTAT	4980
CCTAGACCAA	ATAAACTACA	GCCACTGGGC	CAGGCTCTTC	CTCCTCCAAC	TGGACCATGT	5040
TCCCAGGGCT	CTTCACCTTA	GTTTAGGTCA	AGCATTCTTG	GCAAAAGAAA	GGCCTAGTTA	5100
ACAATAGACA	TTCTAGCAAT	TGATTCTTTT	TGACATGTTG	TAAGATCTAT	TCACATTTTG	5160
TAATTAAAGC	ATTCCCCTAT	GGAAACCAAC	ACGAACTAAG	CTGCTCCTGG	AATGCAGGGT	5220
GGCCTCCTCA	ATACAGGATG	TTCTAGAGAG	CTGTATTTTG	GGCACTTAAC	TATTCTCCAC	5280
TACTTAGGGC	ACAGCACTGA	AATTAACACC	ACTAAGTTTG	TCATGTCCAT	GTAGTTAGTC	5340
TCAGGCAGTG	CAGCCTCAGG	AGTGGAACTG	ACCTCTTATG	TGTGTCCAGC	СТТТСТТССТ	5400
TCAGAAGTCA	GCTGTGTTTT	CTGCTGACTC	TCCATAGGAA	CATCAGTCCT	GAATCCTCAG	5460
ACCACCATCT	GGAGTAGTAA	GTGCTCCTGA	CAGTCCTAGA	AGTTGTCTAC	CGCTGGATCT	5520
CCAAAGCGTG	TGACACACCG	TGAGAGAGAA	ATGAGAAAGC	TGGGCTCTTC	AGGTAAATCT	5580
TGCTTTTTCA	CAAGCCCCCT	AATTTTACTG	CATAATTATT	TTGAATTCAC	TGATAATTTC	5640
TACAATTTTC	CCATAAGTCA	TCTACACACA	ATACCCTCTC	ATGCAACACT	TGGCTTTGCT	5700
AATACATATC	TATTATGAGA	GCTGTGCTTC	TTAAGCGTAA	ATGTTTTATA	TGCACTAAGG	5760
CTCTTGGCTT	ACATATAAAA	GGGGTATTGA	GCAATGTGAT	ACAGAAGTCT	TTTCTCCACA	5820
GGTCTCATAT	GTAAAGAATT	CATTAGATTG	GCTGAAATAG	ACTGATCTGT	ССАТТТСТСТ	5880
GCTCACTTAT	CATAAGGAAG	TCATTAGCTA	AGGAACAAAA	ACTACAATCT	ATGTAATTAG	5940
AAGAACAAGC	TGGTTTTGCT	СААТАТААА	ATAAGAAAAA	GAAACCATGT	GAAAGTCAAA	6000
ATATTTGTTT	AATCAGGTCA	TTGAGAATCT	ATTAAAAAGT	ATTTGAATTC	TTTATGATGA	6060
		SUBST	TITUTE SHEET	(Rule 26)		

GAACTATCTT	GACTCAAGTG	GACAGTGGTG	AGCTTTTTGG	CCTGTGGTCC	CTACGTAGAA	6120
AGGAGGCTTT	GTCATAAAGT	CTTATATGGT	ACAGGTGCCA	AGTTAAGTGC	CCAAGCTTGM	6180
TCTTAAAAGC	ATACTGGATT	TTGTTTTAGA	CTTTTAGTGA	ACTGAAGGGA	ATAAACAAAT	6240
CCCTCTGGGA	GAACTTCTCC	TCCATCCTTG	GTGAAGTCAT	TCTGCCAGAA	TTCTATCTGG	6300
TAGTTACCTT	CTCCGATTCA	TTAAATGTTG	TCCCATGGTC	CGACATGGGT	AATTTTTCTC	6360
TCATTTGTGA	TTAGTTCCAC	TACAAGGAAT	тааататтса	ACTTCTTGCC	TTCTGGGATA	6420
TACTCAGCCT	TATCACAGAG	CTCCTCCAGG	GAAGGAACTT	AGATTCTTTG	AAGAACTTCC	6480
CTGCTCTTAC	CCAAACCGAT	TCAGTTGTTA	ATTCTGTCCA	CCTTGCTCCA	TTTTCAGTGC	6540
AGGAGAAAA	GCATTTGTGG	CAAGTCTGAC	CTTACAAAGG	CTCGTTAATG	СТСААТААСТ	6600
GTGAGGACCT	GCTATAAGTC	ATGCCTTTTA	AGAAAAAATA	CACACATGCA	CACACTCACG	6660
ACAAGACTGC	AACACAACTG	TGATGGCAGC	TTGCATATTG	AACCAGCTGT	TTCCCTAAAA	6720
CATTTGATTC	GGCATCCTTT	GTAGACAGTA	AATGCAAAAG	ACTTAGGTTG	GAAAAGTGCA	6780
TTAGGTTTTG	ATTAACGATT	GGATGAGGGC	CAGTTAAATT	TTTAAATCTG	AATGAGCTTG	6840
CTGACTCAGG	AGCCTTAGCA	GCATAATGGA	CAGACAGTCC	TCAAAGCTTT	CATTAAAAGG	6900
GTTTCTGGTA	ACTGATGTCT	ARAGAAATGA	GTTGAAATAC	AATTCACTGA	ACCACTCAGC	6960
TTTCATCTAA	AACAGAATAT	GTAATCTCAA	AGAACTCAAC	TGGTCTCTTG	AAATATTCAG	7020
GTAAAATTAA	ATGTAAAGAA	GCTAGAGCTT	AAATATTTTG	AGGAAAGGAA	GCCTCCTGTA	7080
GCTTTGTGAC	TATATCACTT	TATCCTTTTG	AATGCCGTAT	TTAATTATGT	TAATTGCATT	7140
TTAAGTATAG	CTGGAGTCAC	CGATCTGCTG	ААААСАААСТ	CTASAATGGT	TTGTGGGAGG	7200
TGCTCAGGAT	GTATCAGAGA	CTGATTTGAT	TTGCATTTTA	TTTTTAACTT	TAGTTCCTCT	7260
CTGAACTCTG	CCTTCTCATG	TTTGTTTTT	WTGTTGTTGT	TGCTTAATAC	AGTCATGTGC	7320
CACCTAATGA	CAGGGATATG	TTCTGAGAAA	TGCATTATTA	GGTGATTTTG	CCATTGTGCA	7380
AACATCACAG	G TGTACTTACA	CAAACCTAGA	TGGCATAGCC	TACTACACAC	GTCTGCTATA	7440

TGGTAGAGCC	TATTGCTTCC	AGACTACAAA	CCTGTATAGC	ATGTTACTGT	ACTAACTACT	7500
GTAGGCAGTT	GTAACACTGG	TATTTGTGTA	тсталасста	тсталасата	GAAAAGGTAC	7560
АТАААААТА	CAGTATTATA	ATCTTATGGG	ACCACTGCTA	TATATGCAGT	CCATCATTGA	7620
CTGAAACATT	ATGTGGTGCA	TGACTATAAT	AGGATCAAAC	TATGCCTTTG	CAGAAATCCC	7680
CCTGGAAAGC	CTCTGAAACT	ACCCTGATCT	TAGAGGCAGT	TTTATAAATC	ACGGCCAATG	7740
ATTCTCAGCC	TTTGGGTTGT	GCCAGAGATG	TGTCCGCTCT	CCTTTTGCAA	TGACCCTAGA	7800
GGTAAAGGTG	CTCTTTCTTC	TTCTGCTTCT	CATGAAAAA	TGTAAATGTT	GTATTTTAGC	7860
ТТСТТТТССС	AGTCTAGTAA	TATCTTGTTA	AATTTACAAG	ATTGTAGCGG	TGCCTCCAAA	7920
AGGGGATAGC	AATAGTTACT	TTGAAAATGG	GTGAGTTCTT	TGCAACCATC	TCTGAGTTGA	7980
ACAGTTCTTG	TATAATCTGT	CTTCCCAGTT	AGGCTGTGAG	CCGCCTGAAG	GCAGCAAGTG	8040
TATCTTTCAC	TCTTCTCTGA	TCTCCTCAGC	CACTCTTCTG	CCCCACAATT	ССАААААТСА	8100
GTTACCAAGC	CATTGTAATT	CCTTTTCTGA	AATGTGTAGT	AGACTCCTTT	TAGGGTATTT	8160
GCCCAGTTCA	CAAAGACCCC	TGCCCTCTTT	GGAAATCTGT	CCTTGCAGCC	ATATATGGTT	8220
TTTGTTTGTT	TGTTTGTTTG	AGACAGAGTT	TCACTCTGTC	GCCCAGGCTG	GAGTGCAGTG	8280
GTGCGATCTC	GGCTCACTGC	AAGCTCCCCC	TCCCGGGTTC	ACGCCATTCT	CCTGCCTCAG	8340
CCTCCCAAGT	AGCTGGGACT	ACAGGCGCCT	GCCACCATAC	CCAGTTAATT	TTTTTGTATT	8400
TTTAGTAGAG	ACGGGCTTTC	ACCATGTTAG	CCAGGATGGT	CTCGATCTCC	TGACCTCGTG	8460
ATCTGCCCGC	TTTGGCCTCC	CAAAGTGCTG	GGATTACAGG	CGTGAGCCAC	TGCACCCGGC	8520
AGCCATATAT	GTTCTATATG	ACTCTTTCTG	AGACAATAGC	TGATTAGAAC	AGTGATTAGA	8580
ACTGTGATTT	CTGAGACAAT	AGCTGATTTC	TGAGACAATA	GCTGATTAGA	ACAGTTGCCA	8640
CGAGCTGGAC	CAATCATATT	AATATTCTCT	ATCTCTCTCT	TTTGCTCTCG	AAATCTCAAA	8700
TTGAGATTCA	GAAACAGCTA	TGTAGTCTCT	GTTTGTGGCT	AGAACTGTAA	CATATGAACC	8760
CAGAGCTAGA	GAGATGCAAT				AGCCGGTCGG	8820
		SUBST	TITUTE SHEET	(Rulc 26)		

CACAGACGGA	ATGCAGTAGC	ACACAGAGAG	AAGCAGACAC	TCGGAGATGT	CTGACACCTT	8880
TCTGCTTAGA	TTCCAGTCAG	TTCAGAGGCC	CAGACGCATT	CCTGTCTGGA	AGCATTCTGA	8940
TCCTGTTTTG	TAAATCAACA	ATAAATCCCT	TGCCACCCTC	TTTGCGTGTT	AGCTTAAGTT	9000
GTCTTGCTCT	тааааатста	AAGAGTTCTA	AATGATATGA	AATGTCTGTT	ATACAGAAAG	9060
TAGAATGACA	ATTGCCAGGG	GCTGAGAGGA	GAGGGAAATG	GAAAATTGCT	CAATGGTTAT	9120
AGTTTTAGCT	TTGCAAGAGG	AAAAAGTTGT	GGATATTGGT	GGCACAACAA	TGCGAATATA	9180
CTTACCACTA	CTGAGCTCTA	TGCTTAGATA	CGGTTAAGAT	GGTAAATTTT	ATGTTATGTA	9240
TATTTTATCG	CTGTTTTTAA	AAAAGTTTAA	AATAGCCTGT	TGTAGTCAGC	TTCCTTGTCT	9300
TCCTTACTAC	TGCAGCCATA	TTCAGGTCTC	CATGGCCCAA	GGTATGGACA	ACTGTAGTCA	9360
CCAAACTGGT	CTCCCCACTT	CCACCCCTTG	GAATTTGGTC	CCCAGCAATC	TACCCTACAT	9420
GCATGGAGCA	ATCAATATTA	CCCATAAAGC	ACTAACGCTG	TGCTGTACTC	CAAAATGCAA	9480
ACCTTCATGG	TGTCCCATTG	AATTCAGGAT	CAAGTTCATA	CTCCCCAGCT	TGTCATACAG	9540
GACCCAGTGA	TCCTTTCCAA	CCTTCTGACC	TACTGATTCC	CAGTAGGAAG	CAAACCCTAG	9600
CAAGACTGGT	CTGCCTCATC	CCAGAACAGT	ACTTACTCAT	GCTGTTTCCT	TGCCATGATT	9660
ACCTTCCTTC	TCCTCACCAC	ATCTTATCTT	TCTTTCACTT	GATCTTAGTC	CAAATGCCGA	9720
GAAGCAATCT	ТАТСТТАСТТ	TCAAAGCCCA	GGTTCAGACC	CATCAATTCT	ATAAAACATT	9780
TCTGACCACA	CTAGTCCTCC	ATGGACATTT	ATTTGAATTG	AACTTCTTAG	CATTTAAATA	9840
TACACAGTTT	CTTATTCATC	TGTCTTGTTC	TTCTGCTAGT	TTATAAATTG	CTTGATTATA	9900
GAACATGAGC	TTGATAATCT	TTGATTTTTC	CTGGATACTG	TGTTCTTGCT	AGGCTGTTAA	9960
TAATGCTTGT	TGAATGAAAT	GAGAAATGAA	GAACGGCTGC	TTTACCAGTT	TGTCTCTTCT	10020
GCCAACTTTT	TTACATGGAT	TTTACACGTC	AACTTTTTTA	CACAATGATT	AAATATACCT	10080
AATTTGATCA	TCCCAACAAC	ACTAGTAAAT	ATATATGATC	ATTATCCTCA	TACTACAGAT	10140
GAGGAAACAC	AGGCACACAT	CGTTTGTTTG	TTTTTTTT	TGAGACGGAG	TCTTGCTCTG	10200
				CD 1 0 C)		

TTGCCCAGGC	TGGAGTACAG	TAGCACGATC	TTGGCTCACT	GCAACCTCTG	CTCCTGGGTT	10260
CAGGCCATTY	TCCTGCYTCA	GCCTCCCGAG	TAGCTGGGAC	TACAGGCATG	TGCCACAATG	10320
CCTGGCTAAT	TTTTGTACTT	TCAGTAGAGA	TGGGGTTTCA	CTATGTTGGC	CAGGCTGATC	10380
TCGAACTCCT	GACCTGATGA	TCTGCCTGCT	TCGGACTCCC	AAAGTGCTGG	GATTACAAGC	10440
ATGAACCACT	GTGCTGGGCC	AAGCACACAT	AGTTAAATAA	CTTGCAAAAA	AAAAAAATC	10500
GTATCTATTT	GTAGGAGGCA	GAGTCGTGAT	TCTGAGCTGA	ATCTATTTGG	CTCCTAAGCT	10560
TATGCTTTTT	CTACAGTATC	ACCACATATC	CCATACTCTA	TTGTTATTGT	TGGCTTTATT	10620
GCCTGTTTTT	CCTGTGAATT	TTAACCTTCC	CAAAAGCAGG	AATCTTATCT	CAGTATATCA	10680
CAGAGAATCA	CTAAGTATCT	ATAGAGGAAA	GGAAGGAGAG	AAGGAAAGAA	GAAAAGGAAG	10740
AAGGAAAGGA	GGGAAGAAAG	GAAGAAGGAA	AGGAGGGAAG	AAAGGAAGGA	AGGAAGGAGG	10800
GAAGGCAAGA	GGGCAGGAAG	ACAGAAAAGA	AGGAAGGAAG	AAGGAAGGAA	GGGAGGGAGG	10860
AAGGAAAGAA	GGGAGGGAGG	GAGGAACGGA	TAGGAGGGCA	GAAACTCTGG	AAAGGAGCTT	10920
GTCTTACTCC	TAAGCTTGGT	AAAGATCAGT	CTTGCAAGGG	GCTTGACTAG	AAAACACTGG	10980
CTTATCTCAC	TGAACCATAT	TCCCAATGTC	ATTGACTCCT	TTCCCCTGGG	GAGTAATTCA	11040
ACCATGTGTT	CACTGTATGG	ATCAGAGTTG	ATGATGAATA	TTCTCTTGCC	TCAGTCTCTT	11100
TTGGCCAGAG	TTCCTTGGCT	TCCAGCCTGC	TCCTTGCTTG	TTTTGAACGA	ATAATATATG	11160
ACTTTCCTTC	TTAACTGGCA	AATGCTGAAC	TGTGGCCTCT	CTTAACCCTC	AAGTCTCCCG	11220
ATAAAAAGCA	AAATATTAGA	TTCGCTGACC	AGCGCTACTC	CTTACCCCGG	CTGATTTCAC	11280
ATGAAGAGCT	ATATATGGGG	TGGTAACATA	GGTTTAAGGA	TGGATGTGCA	TATAACTCCT	11340
GGATACCGTT	CCTGAAAATA	TACTATTGGG	GATTATTTCT	TTGGTTGAAG	AGTCCCTTCA	11400
CTACCACATG	TCAGTCCCCT	ТАССТАТААА	ATGGGAACCT	TAGGGTTGTT	ATAAGGATTA	11460
AATGAGTTAA	TGTGTATAAT	GTGCTTAGCA	CAGTACCTGC	CACTCAATGC	TATTATTGTT	11520
GTTGTTGTTA	TTATTATTGG	TAGTAGTAGT	AGCAGTAGTT	GTTGTATGAA	GATGCATGAT	11580
		PORITO	TTTTE SHEET	(Rule 26)		

TTCCTGGGAA	AGGTAGCACA	TTAAGGCAGG	ATCAGTCATG	AGTTACCTCA	AGCAGATTAA	11640
TTTACTAGCC	CTTTCATGCT	ATTTCCCAAA	GGGATGGTTT	ATCAAGTTGA	GGAAGATGTA	11700
GATGTGATTT	ATGATGGATT	TGAGGTTAGT	ACTGTGTATC	CAGGTTGTGT	GTGAGAAGAC	11760
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GGACCAGGGA	GCAGGGTGTC	CACTCTCATT	CCAGATTCTT	TTGAATTCTG	TATATTTTAT	11940
TCTCTTTCCA	CAAACAGACT	TTCTATCCAC	GGTGGTGATG	ATAACCAATA	ACATTTCCTT	12000
CAGTCTCACC	CTTGTAGCTC	TGTGACCAAA	AATGCAAAGC	TGCTGCTTCT	CCAGCTTCAA	12060
AATTTAATAA	GAATCACAGG	GCAGAACATT	TATTGGCTAG	GCCTGAGTTG	CATGTCTAAC	12120
CTTGGAGAAC	TCACTTTGAA	TAGGGGAATT	CAGAACTAGG	ATTGGTGGCT	CCACAAATCT	12180
CACAAAAATG	GAGCAAARTA	GGAACTCATC	AAACAGAAAT	CAATAGATCT	CCACTGGCTT	12240
TATAGTACGT	GGTTCTGGGA	ATCCAGATAT	TCAGAGCCTA	GGTGAACCTG	AACATTTCCC	12300
TTTAGGCAGA	TGGAAATCCA	CGTTCTTCTA	GCTAAAATTT	TTCCATTCTC	TTTGAGGGGA	12360
GTTTCCATGG	AGAGGCTAGC	TTTGTGGGAG	AGAGTGGGAA	RAAACAACTC	ATGCTGTTTT	12420
TCATTGGGGA	CCATTCTTAT	TGCTACTTTA	GTCCAGTCCT	GCCCACGGAT	CACACATTAT	12480
TCCTTACTCT	TGTTGCTTCT	GGGCTTTTTC	TTTTTCCTTT	GCATGCTGCT	TATATTCCCT	12540
TCCCTAAAAG	CTACTCTATT	AAGAGGGAGA	TTAGGCAAGT	AGGCTGGTTT	GATTATGTGC	12600
TGGTTTAACC	CATAATCACA	TACCTCAAAA	AGAAAATGTC	AGACACACTA	TAATAGCTCC	12660
AGATACAAAA	CATGAAGTAC	GAAGACCTCT	TCAGAAAACT	GCAGGCTTGC	TACTCACCCA	12720
CAGACAAATA	GAGCTGATTC	TATTAGAACA	GTGAGGAAAG	AACACAGTAA	AGAATGGCAT	12780
TTAAGATCAA	TTGTGGCAAT	GTCTAATTTT	GTCTGGGAAG	ACCATGGCAG	TGAGGGATGC	12840
AAAGGGATGA	CATCAAGTTT	TCAGAACAGT	GCCTATATGT	TTAGGACGAA	GAGTTAAATA	12900
ATGAGAGAAA	ACAAATGCAA	TACAATTTCA	TTGGCTACCT	GGTTAGACCT	AGCATGAACT	12960
						

GTGTCTGTGA TGGTGCTATT AATTTGTGAT GGAGACATTG GATATTGTCT TTCCCTATTT 13020 GGTAAGAGCT TGATTCAGGT AGAGAGAAAC AATAATTATT TTACAGTGTA CAAAGCACTT 13080 TCTTATACGA TATATTATTT TCATCCTCC AACTAGTTTG ATAGGCAGTA ATATTATTCC 13140 CATTTCACAG AGGGGGAAAC CTGGGTTAGG GCCCAGGAAC TTGGCTGGTG AGTTTGGAAA 13200 GCTTGAATAG CAATGATTAT AATCTTGGTG CACAGAAGCA GCCAGTGAAA TTCTGAAATG 13260 CATATTTCTG TTCTCTACTT CCAGAGGGTC TGATTGAGTT AGCTTGGGGA AGGGCCTAAG 13320 AAATGGAATC TTTTTTATTC ACACCAGGTG ATTTTGAAGC ATGGGGTCTA CTGAGTATGC 13380 TTATGAAACA TTAACTTTAG GTCCTAGGCA CTGGCTTAGT TGACTGTGAG AAACTGAAGC 13440 ACAAAATTGT GTGACCAAGT TCTTTCTGAG CCTCAGTTTC CTCACCTGAA AAATGAATGA 13500 TGATGATAAA AATAACTAGG CTCCATGCCA AGTGATTTAC ATATTTCCCC TCAAATCATC 13560 TTTCTTACAA ACCTAGGAGT TCGGAGGCAT TGTTGTTCCT ATGCTATGGG ACTCAAACCC 13620 AAATCATTTC TACTCACTCT TCCTTTCATA ATTGTCAGGA AGATTAGACA TAGAAAGTAT 13680 CTAGCACATA TTCCTGATGT TGAAGGAATA GCAGCAGCTG TTATAACTAC TACTAAAACT 13740 GACAATACTG ACCATACAGC CACCACTAAA ATGYTGGGGT TGAATTCAGA TAATCTCTAA 13800 GGTTCTTCCC AGCTCCACCA TACCCTGATT TCAGCATTTC AAATATATGC TGTATTTGTG 13860 GGGGGGGTTC CTAGAAAGAG TGTGGCAGTA ACTGAACTCA ACTATACAAA AGACCGAATT 13920 CTTCCTTTAG TTGGAGATTT ATTGATTTTT GTAAGTGAGT TTATAGACAA AAACGAGGAA 13980 GATACAGAGA AAAAAGAGAA GAATTACTGT GCTTTGATAG TAGGGCTATG GGTGATTATT 14040 TTATTTTAA AATTTTATTT TTTATACATT AATGTGGTTT CTATAACAAA CACAAATTTA 14100 GAATAAAAGT AAGATATTTC TCTTGTGCTT CCAATTTACC ATATACTTCT TAAATGTATT 14160 TGTATCATAA TCATCAGCTG TAAGTTTACT ATTAAAAAAA ATCAACAAAA GAACAATATC 14220 AGAGCTAAAG GACTTCAGGC CTGATGAACC TAAGTCTAGT TTCTGTGCTC ACTAGCCTTG 14280 GCTTATCCCA AAATATTAAA AGTAAAATAT GATCCAATCT GCATCTCTTG CACATGTCAT 14340

GTTTTGTAAA	TAGAAAGTTC	TTGGAACAAT	CTGTAACATC	GTTGAAGTAC	TTCATTCAAT	14400
TCTTGGGCAT	TAAATTTTAT	CTTCTGTTCC	TGCCTCATAT	CATTAAACAG	TACCTTCACC	14460
TACATTGCAG	TCAACTATGG	AGGACTAATG	CTCTATTTTT	TTTATGTTGA	ACATGAAGCA	14520
TAAACATGTA	CAGCTCTGAA	CCTGAGTTTT	CCTTGCTTTA	GAAATAAGAG	GTGTTGATGA	14580
AAGAGGAAAT	CCCTGAGACT	CTGTAAACCT	WACCTGCAGG	TATGAGAATA	CAATCTGTGT	14640
TTWATTTATK	GTATTCTTWA	GCAAAATTAT	AGTAAAATTA	GTATTTTCT	TTTCATTTGC	14700
TCTCGAATTA	TCCTTTAGTA	ACAGAGTGAA	CTTGTATGTC	CATATTTTGG	GTTTAAAGAA	14760
CATGGTTACT	GTAGCAAAGA	AGGGGCTAGC	CCATGTATTA	AGGTCCTGGA	TTATACTGTT	14820
GCTCACAGGA	GAGCATGGGT	TTGAAGATGA	GGCTGCATAG	TAAAGTAGGT	AAAAGTTTGG	14880
ACCTTGGGGC	CAAACTGCCT	AAGCTCAAAT	CATGGTCCTG	CCAGTACTCT	CTGTTCGACC	14940
TTTAGCAAGT	TACTTAATCC	TTGTAGACCT	CTGATTTGGT	СТСТТСАААА	TAGGGATAGC	15000
AATAATGCCT	GTCTTATAGA	GACATTGTGA	GGATTCAATG	AATTGATATT	TGTAGAAGAA	15060
TATTGAGTTG	GTTTTGCTAG	AAGATATTAA	GTGCGCAGTC	ТТТСТААААТ	AACTAAATGC	15120
TACAAAAAGC	AAAATAGCCA	TTCTGCAAAG	AGCAGTGATT	GAAGCAGGAA	AAATGCCTGC	15180
CTTCATAAAG	CTTACATTAT	AAGGAGAGAA	AAATAAGCAA	AACAAACTAC	GTGGTATATA	15240
TGTAAAATAA	AAATAAAGAG	GGGGAAGCAT	GGGGTGGGC	AGATATTGCA	GTTATAAATA	15300
GAATGGTCAT	TGGAGGCTTT	ATTGAAAAGG	GGACATTTGA	GCAAAGTCTT	CAAGGGGGTA	15360
TGGAAGTGAG	CCATGTGAGT	ATTTTGGTGT	AGGGAAGGAA	AAACATCCTT	CTACCCTCTT	15420
AGGTTTGGTG	GCTAACCTAA	GAATTAAAAC	AACATAGATT	AACAAGAGAA	AAGCATGCAC	15480
АТТТАТТТАА	TGTTTTTATG	TATACATGGG	AGTCCTCAGA	GAAAAATGAA	GACCCAAAGA	15540
AGACTTTATG	CCCCAAAGCT	TATATACATT	TTTTACACAA	AGAATGATAA	ACTGTGGAGA	15600
TGTGACAAGA	CAAAAGGCCT	TGGGCTAGAA	GCAGTAAATT	GTGGGAGTAA	GGGATATACA	15660
GGCGAAACTA	GTGGAAAATG	AGGATGATTT	TAGTTTTTT	TTACAGGTCC	ATTTCGATGA	15720
		SUBST	TITUTE SHEET	(Rule 26)		

TAACTCCAGT CATCTCTGGT GATACTATTC TTCTCTTCCT GGCACAAGGA GGGCACCTTT 15780 CTCATGGGAA ATTTTATGAC CTGCTTTTTG GTAGAAAGGG GAAGTCTGAG AGCTCTTCCT 15840 GCCCCTAGTG TTTCTCAAGC GCCTTCAGCT CAAAATAATC ATTATGCCAA AGTGGCATAT 15900 TTTGAGGTGG CATGTTCTGA GCCATTTCAT GGGGTAAGGA TATTCCAGGC TGAAGGAACT 15960 GGGAATGCAA AGGCCCTTAG ACAGGAACAT GCCTGGTATA TTCAAGAGAC ATCTGGGAAG 16020 CCAAGGTAAT GAATGACAGC AGAGCATGAG GGTGTGGGTG GCAGGAGATG AGGAGATGGT 16080 ACAGGAGGCA CAAATCAGGC AGCATGTTAT TGATCACCGG CAGAGCTCCA GGTTTCATTC 16140 CATTCTGAGT GACATGAACG GCCATCAAAG GTGTTTGAGT AGAGGAGTGA CTGTGTTTAG 16200 AATGGACTGC AGGGGAATAA GGGTAGAAGC GGGAAGACCA GTTAGAAACT GTTAGAGATG 16260 ATAGTGGCTT AGACCTGAGT GACAGCAGTA GAATAGGTAA GAGATGGATT ATGAGTGTGT 16320 CTGGCTGATT CACTCTTATA TCCCCTATGC TAAGGCATCA TGCTTGGCAC ATAGTAGGGA 16380 CTCAATAAAT ACTTGCAGAG CGAATGAATA AATGGGAGTT CAACTTGGGT AAGGCAACTT 16440 CTCTAAGGCT CTGTTTCCTC ATCTCTAAAA TGAGGGTAAG AAAAATATTA ATAGATCTAC 16500 CTCCAACGGT TATTGTGGAG ATTAAATGAG GTCATTCCCA TGCATTGCTT AGCATAGTAA 16560 CTGAAACATA AGATAGGGCT AAGATGTATA CATACACATA AATATAAAGC ATTTTTGCAA 16620 GAGTTTACCT TTGGAGACAT GGAGGAAGGT AGACTTTTAT TCTTCATTTT ATGAACTAAA 16680 AGCAAAAGAA GAAAACAAGT GTTGAAATTA TGAGTCATTT TCAAGTTCTT TTTGTACTTT 16740 TCACTACCAT TTGGAATTTT CCTATAATGA ATATGCGAGG CAAAGACAGA AATGAAAGGA 16800 TAAGATCACT CAGAATTTCA GGTTTTTATA AAGCATCAGA AATGTAAGAC TTTTTTCTGC 16860 TACTGCATGG CCCATTTCTC TGACTCTTTG AATGTGGGTA TTATTCTCAT CTTTCTCCCT 16920 CCTCTTCTCT TTTTGGTTAA AAGTAAAGAG AGCTTTTGAA GCTATTATGG AACAAGAACA 16980 ACAGCCTAGT TCATCCTCAC ATTTTGGAGC CTCTTATTCC TTCCAAAGAA CAAACACATC 17040 TATTTAGTGG CTAAGAGTCT CTTGAGCTGA AACCATTCAT CACCATAACT ACATTCAAAC 17100 SUBSTITUTE SHEET (Rule 26)

TGTCTGAGGT	ATACATTATA	ACTAAGAAAA	TGGGGTTCCT	CATTGGAATT	TACAAACTAA	17160
ATATTCAAAG	AAGGGTTCTG	ATGCTTTTAA	AATAGGGGCG	CCACCAAAAG	GTAAAGTAAG	17220
ACATGTGGTT	GAAGACACAG	GAAAGGCCAG	AGGTCACCAG	AAAAGTTGGT	TGTCACGCCT	17280
GATCTTAGGG	CCTCATAAAG	АААТААТТАТ	GGCAGAATGA	GCCCTAAGAA	GCAAGCACTT	17340
TAGCATGGCT	CTCCCTGGAC	AAAGTGGAGA	GGCCCTTCCA	CCCTAACTTA	TCCTATTGTC	17400
CTGGTCTTCA	GTCTTTCCTG	TCTGTTTGCC	TTTCCTGGTG	ТТААТАТАСТ	TGTTCCTAAG	17460
GTTTTCACCC	TGCTGACTTT	TAGCTCTTCT	TGCTAAGATT	CCTGGCTGTA	CATTAGAAAA	17520
CTCCTGAGCA	ACTAAACACA	АААААТАТТ	TGGCAGGGGG	ATAGGGGGTG	CTTCTAGGCC	17580
CTAACTAAGA	CCTGTTAAAT	TAGAGTCTCT	TTCGGGTGGC	TCCTGGGCAT	TGGGGTTTTT	17640
TTGTCCTTTT	TTTTTTTTT	TTTAAATCTA	AAGCTTCCCA	GTTGATTCCA	ATATGTAGCC	17700
AGAATTGAGA	CCAGAAAGCT	GTTAATACCC	AAGTAGTATA	СТААТАТТАА	TAATGATCAT	17760
AATAGATTAA	TAACTAACAT	TGAATGAACT	TTAAATGTGT	TAGCTGATTT	AATTCTCAAT	17820
GACTCTGAGG	CAGTTACTAT	TATTATTAAT	GTACCCCTTC	TACAGATGAA	GAATTCAAGA	17880
TACCAAAAAT	CTACATAATT	TGGCAAACAA	GTAAATGCTA	AAGTTGGAAT	TCAAACACAG	17940
GTAGTTTAGT	GTCCGAGCCC	ACACTCTTCA	CCACCACACT	GGTGGATTGC	CCACCTGCAA	18000
TGTTAAAAAT	CGCAGAGGAT	AGTGATGATA	CTGCAGACAC	ACTGCCTGCA	ттттатстсс	18060
TCCTTGTTAG	GCTGAGCCAT	TCATACCTCA	GTGGTCCACA	CCTTAAAGGC	AGGATATAAA	18120
GGTAAATATA	TGTACCTTCT	CTGATATGAA	CTAGAGACTC	CATCCCTTCT	TTTTAAGTAA	18180.
TGTAAATGAT	TAACCAGCTT	TCTGTTATTC	CTTTCAGAAT	CTCATTCATA	GAATAAATTC	18240
CTGGCATAAA	TTAGTATCAT	AAGTTTTCTA	TTATTGCTCA	TTAATCAGTA	TGTGATGTAA	18300
GATCAAGCAG	TAAGAGTTCC	CCCCAACCCC	AAAGAATGGT	CTTTCTGTTT	GTGACAAATT	18360
ATTCTTGGCA	ATGTAATTAG	CCAGTTGGGT	TATTGAGGGG	GATCCACTAG	TTCTAGAGCG	18420
GCCGCCACCG	CGGTGGACTA	GAT				18443

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(2) INFORMATION FOR SEQ ID NO:7:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 11811 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

CCTGTTAA	AG	TTTACCTTGT	ATCTTAAAAC	TTGCCCTAAC	CGGATTAATT	TTCTGGCCAA	60
ATAGGGAG	GC	TGAATGAAAG	TTTCACATAA	ACCTTAGATA	CTCCTAATTA	ACTGTTTTTT	120
ATGTCTGT	TT	TTCTAGGACA	CATGTTCAAA	GAGCATAATT	AACTTTTTAA	AAGAAGCTAG	180
TAAGTACT	'GA	AATAGTTTTT	TAAGTTTTTT	CTACAAGAAT	AGAGGAAGAA	AGGAAACATG	240
GAATTCTG	AA	GGGCTACTTA	GCAAGCTGCT	TATGGCATAA	TCTGGGGTGG	GGGTGCATAG	300
TAAAGGAT	тт	GCATTTTACT	GAGACCGATA	CATGTCAAGG	GAATGGTATT	TAAAATTAGT	360
GATATGTG	тт	GATTTTTCAA	GGACTATAGC	CCATCAACTA	CAATAGGCTC	СААААААТТС	420
TGGTGAAA	TT	AGCTTCTTGG	AGCCTTCCAG	TTTACCTACT	ATGTTATTCC	САСТАТААА	480
ТАТТСТСА	AC	TTTTGGGGTT	TTAGCCACTT	AAGTTTTTTA	TTTTCTCTAA	TGTCTCTAGT	540
ATCTGCTT	TA	GTTTCCTGTC	AATGCTAGAC	TCTGTGGTTC	AGCAGTTCAT	CCATTCTCTT	600
CCCAGTAC	TC	AACCTCGTTG	CTTATAGTTT	CATTACATTC	ATCTAGCAAA	ACCTTAATTC	660
TGTATGTT	TG	CCATACCATT	AGTGCTTAGA	GCATTTTTTC	AGAAAAGAAT	CCTGGAAAAA	720
TGGATCTT	TAT	CTCACCTGGG	CCCTCAGGAC	TGCTGGGCTG	CCTGGTGTCA	GCACTTCCCG	780
CCATTTTC	TA	TAGCACCAGT	ATTATTCTTA	ATACTTTAAA	AAACCACCAG	GCACGGTGGC	840
TCACGCCT	rgg	AATCCCAGCA	CTTTGGGAGG	CCAAGGTGGG	CGGATCACAA	GGTCAGGAGA	900
TCAAGACC	AT	CCTGGCTAAC	ACGGTGAAAC	CCTGTCTGTA	CTAAAAATAG	AAAAAAATTA	960

GCTGGGCGTG GTGGCATGCA CCTGTAGTCC CAGCTGCTGG GGAGGCTGAG GCAGGAGAAT 1020 GGCGTGAACC CGGGAGGCGG AGCTTGCAGT GAGCCGAGAT TGCACCACTG CACTCCAGCC 1080 TGGGTGACAG AGCGAGACTC CGTCTCAAAA AAAAAAAGTA AATAAAAATA AAAAACCATA 1140 TCCCACTATC TCCCCCTTCT CTCTTTGCCT GTGATCTTGC TGCATACTTA TGGGGAAATC 1200 TTTAAGATGT CAGATTTCAG TTCTCTCACT TTTCTACAAC TTCTCCCACT TTTGCCTTTC 1260 TTATGTACCT TCCCTTCCTT CCCATCTGAT TCCTTATCAG TATTTACACA TGATTAGTTC 1320 TTGCCTAACC TAATAGACCC TTTCTTGAGT GCAAATCAGT GGCTATTTTT GCTAGGGTAT 1380 AAAAATTACC TATCTAATCA CCTTGACAAA GTTACCCTGT TATTTCCAAT AACTTACTTC 1440 CTATGGATTC TTGTAGATTT TCTTTTTTT TTTTTTAATT TTTTTATTTT CAGATGTTTT 1500 CTCGCTTTGT CACCATGCCT GGCCTAAATT CTCGTAGGTT TTCTATGTAA ACAATCAGAT 1560 TTTCTGCAAG TATTAGTCTC CTTTCTAATT GTTATAATTT TAATTTCTTT TTCTTTTTAA 1620 AATTTTCGT AGAGACAAGG TTTTGCTATG TTGTCCAGCC TGGTCTTGAA CTCCTGGGCT 1680 CAAGCAATCC TCCCATCTCA GCCTCCCAAA GTGCCATTAC AGTGGCATGA GCCACTGTGC 1740 CTGGCCAAAT TTCTTTTCTT GTTGCGAAGG CAGACTTTTC ATACAATACT GAATAGAAGT 1800 GATAGTAGAT TACTTTATTT CTGATTTTCA AAGGAATGCT TTCCGTTTCT CTCTGTTGAA 1860 GATAATTGCG TATTGTTTTT TTTTTTAAAT AGTAACTTTT ATCAGGTTAA GGAAGGTTTC 1920 TTCTATTCT ATTTAAAAGG ATTTTTTAAA ATCTTGAATT CATATGTTTT TATCTAATGC 1980 ATTTTCTACA TCAGTTGAAA TGGTTGTATG AACTCTTTTA ATATGGGTGA ATTATATTTA 2040 TAGATTTTAT GTTAAAATAT CCTTGTATAT CTTGGATAAA CTCAACTGGA TCATGATTTA 2100 TCTTTTTAT ATGCTAGATT CAATTTGTTG ATACTTTGTT ATGATTTTTG AATATATAT 2160 ATTGTGTAAA AGTGAGCCTG TGATTTTCTT TCTTGTAATG TTTCTGTCCA GTTTTGGTGC 2220 CTGGTTTTGC TCTCTCTTA GAATGAGCTG GGAACTAGTC ACTCTTGTTT TCTCACCTAT 2280 AATAGCATCT GGGTCCAGTG TTTTTTATGT GGGACAAATT TGAACTTGTG GTCAACCTCT 2340

TTAATTGTAA	GAATATTCAG	GTCTTTTGTT	CTTCCTGGGC	TAGTTTTTTA	TTCTTTTTCT	2400
AGAGATTCGT	TCATTTTTCT	TAGTTTTATT	TGCCTATAAT	TGTGGATAAT	CTGTTTTTA	2460
TCTGCTACTT	CTGTAATTAT	TTCCACATTT	GATTTATAAT	ATTAACTTGT	GGGCCAGGCG	2520
TCGTGGCTCA	CACCTGTAAT	CCCAGCACTT	TGGGAGGCCG	AGGCGGGCGG	ATCACGAGGT	2580
CAAGAGATCG	AGACCATCCT	GGCCCATGGT	GAAACCCCGT	СТСТАСТААА	AATACAAAGA	2640
AAAAAATTAG	CCGGGCGTGG	TGGCAGGCAC	CTGTAGTCCC	AGCTACTCAG	AAGGCTGAGG	2700
CAGGAGAATG	GCGTGAACCC	AGGAGGCGGA	GGTTGCAGTG	AGCCGAGATC	GCACCACTGC	2760
ACTCCAGCCT	GGGCGACAGA	GCGAGACTCC	АТСТСААААА	ТАААААААА	TTACTTGTGT	2820
CTTCTCTTTT	TACCTGTTTG	TTAATTTATC	AAATAACTAC	TTTTGGCTTT	GTTTCATTTT	2880
ТАТТАТАСАА	TAAAATGAAA	TTCTTTTCAT	TGTATTTCTT	TTCATTGATT	ATTCCTATAA	2940
TTCTTAAACA	ACTTTATAAT	TGATGTAACA	ATAACCTGTA	CACATTTAAA	GTGTAAAATT	3000
TATTACATTT	TGATCCATGT	ATATAGCAGG	GAAATATCAC	CACAACAAGA	GTGTGAACAT	3060
ATAATCTCTC	CCCAAAGTTT	TCTTGTGTCT	TTTATAATCA	CTGCCTCTTG	CCCTGCCCA	3120
CTCCCTCATC	CTTAAGCAAC	CATTGGTCTG	TTTTCTGCCA	CTATAGATTA	GATTGTATTT	3180
TCTAGAGTTT	TATACAAGTG	AAATCATGTA	GTATAGTATT	AACCATGTGT	TTGTTTGTTT	3240
GTTTGTTTCT	TTCTTTCTTT	CTTTTTTTT	TAGACGGAGT	CTCGCTTTGT	CACCCAGGCT	3300
AAAGTGCAGT	GGGGCGATCT	CGGCTTACTG	CCAGCTCCGA	CTCCGGGGTT	CACACCATTC	3360
TCCTACCTCT	GCCTCCCGAG	TAGCTGGGAC	TCCAGGCGTG	CCCGCCACCA	CGCCCAGCTA	3420
GTTTTTGTAT	TTTTAGTAGA	GACGGGGTTT	CACCATGTTA	GCCAGGATGG	TCTCGATCTC	3480
CTGACCTCGT	GATCCGCCCA	CCTCAGCCTC	CCAAAGCGCT	GGGATTACAG	GCAGGAGCCA	3540
CTGCGCCCAG	CAACTATGTG	TTTCTGATCC	TTTGTCAGGG	CTAGCCAATT	CCTAGAGACA	3600
GTGAATAACT	CACTCATAAT	CTAGCTGCCT	CCTTTATGTC	GCTCTCATAG	GACTTTGACA	3660
CCTCTCTGCT	ACAATCCACC				GAAACTCGGG	3720
		SUBS	CITUTE SHEET	(Rule 26)		

ACATCCCTAT GCTGCAGAAC TCACTGAAAT TATTCAAACT AGCCAGTCCT AAACATGCTT 3780 ACCCTGCCTT GCCCATTCCT TCCGCTGAAA CCACATAAAG GCTCTTGCCC ATGTTTTCAT 3840 CCCATTCCAT TGACCTCCTT ACTGACCCTA GCTAGTGCTT CCTCATGTGG CCCCTGCATG 3900 GCATGGTGTG CACCTTCCTC TTCGGAACTG CGAGTAACTG TCTTGTCAGC GGCAATCATC TTGTGATCTG TTGGCCTCAT CATATTTGAA TAACAATAAA ATCTGTTTTA AGGCTGGGCG 4020 CGGTGGCTCA TGCCTGTAAT CCCAGCACTT TGGGAGGCCA AGGCAGGCGG ATCACGAGGT 4080 CAAGAGATTG AGGTGAAACC CCCTCTCTAC TAAAAGTAGA AAAATTAGCT GGGCATGGTG 4140 GTGCGTGCCT GTAATCCCAG CTACTCAGGA GACTGAGGCA GGGAATCTCT TGAACCCAGG 4200 AGGCAGAGGT TGCGGTGAGC CAAGATTGCA CCACGGCACT CCAGCCTGGT GACAGAGCGA 4260 GACTCCATCT CAAAAAAAGA AAAAAAAAAA ACTGTCAAAT GATACTCCAA AATGGTTGTA 4320 CCATTTATA TTTGCAACAA CAATGTCTGA GGGTACTGAT TGCTCCATAT CCTTGACAGC 4380 ACTTGGTATA GCTGATCTTT TAATTTTAGT CACTTTAGTG GGCATATACT GGTATTTTAT 4440 GTTTTACTTT TTATTTTCCT AATGATTAAT AGTTTGCAGC ATCTTTCATG TGCTTATTTC 4500 CCTTTCATAT ATCTTCTTTG ATAAAAATAT CTGTTCAAAT ATTTTGCCCA TTATTTTGTT 4560 GGAATACTTA TTTTCTTACT GTTGAGCTTT GAGAGTTCTT TATATATCTG GATACCAATC 4620 CTTTGTCAGA TATATTTTTT GCAAAATTTT TTCCCAGCCT GTGATTTAGT TTGTTATTCT 4680 CATGTCTTTT AAAAAAAATT GTAGTTAAAA TATACACATA ATACAAAATT TAACATTTTA 4740 ACTCTTTGTA AGTATACAGT TTTGTGGTAT TAAGCATAGT CACATTGTTG TGCAACCATC 4800 ACCGCCATCC ATCTCTGGAA CTTTTTCATC CTCCCTGACT GAAATTCTGT ACCCATTTAA 4860 ACACTAACTT CTCATTCCCC CTTACTCCAG CCCCTGGCAA CCATCGTTCT GTTTTCCTTC 4920 TCTATGAGTT TGACTGCTCT AAGTACTTCA TATAAGTGGA GTCATACAAT ATTTTCATTT 4980 TGTGACTGGC TTATTAGTAT AATGTCTTCA AGTTTCATCC ATGTGGTAGC ATGTGTCAGA 5040 ATTTCCTTCC TTTTTAAGGC TAACATTCCA TCCTATGTAT ATACCACATT TTATCCATTC 5100

ATCTGTTGAT GGACATTTAA GTTGCTTCCT CCTTTTGGCT ATTGTGAATA ATGCTGCTGT 5160 GAATGTTGTT GTATAAATAT CTGTTCGAGT TCCTGCTTTC AATTCTTTTG AGTATGTTCC 5220 CAAAAGTAGA ATTGCTGGGT CATATGTTAA TACTGTATTT AGTTTTTTGA GGAATTGCCA 5280 TACTGATTTC TATAGTAGTG GTACCATTTA CATTCCAACC AGCAGTGTTC AGGGTTCCAA 5340 TTTGTTAACA TTCTTGCCAA CCCTTGTTGT TTTCTGGATT TTTTTTATTT TGGGGTTTTT 5400 TATTTATTT ATTTATTTT TTTTTGAGGC AGAGTCTCAC TCTGTCACCC AGGCTGAAGT 5460 GTAGTGGCGC AATCTCGGCT CACTGCAACC TCTGCCCCCC GGGTTCAAGC GATTCTCCTG 5520 CCTCAGCCTC CGAGTAGCTG GGACTACAGG CGCGCGTTAC CACGCCTGGC TAATTTTTTG 5580 TATTTTTAGT AGAGGTGGGG TTTCACTGTG TTAATCAGGA TGGTCTCGAT CTCCGGACCT 5640 TGTGATTCAC CCGCCTCAGC CTCCCGAAGT GCTGGGATTA CAGGCGTGAG CACTATGCCT 5700 GGCCATTTTT TATTTTTAAA CAATAGCCAT CCTAATGGGT ATGAAATAGG TTTTTTGGTG 5760 TTTTGTTTTT TTTTTTGAG ACAGAATCTT GCTGTGTTGC CCTGGCTGGA GTTTAGTGAC 5820 GTGATCTCGG CTCACCTCAA CCTCCGTCTC CTGGGTTCAA GCACTTCTCC TGCCTCAGAC 5880 TTCCAAGTGG CTGGGACTAC AGGCGCCCGC CACCACACCC AGCTAGTTTT TGTATTTTTA 5940 GTAGAGATGG GGTTTCACTG TGTTGGCCAG GCTGGTCCAC GATCCATCCA CCTTGGCCTC 6000 6060 GTTTTTACTA TTTTTTTTT TTTTTAGAGA CAAGCTGTCT CCCAAGCTGT AGTGCAGTGG 6120 CACCATTCGT ATCTCACTGT AACCTCAAAA TCCTGGACCC AAGCAATCCT CCTGCCTCAG 6180 6240 TTTTTTTTT GAGAGTTTTG CTCTTGTTGC CCAGGCTGGA GTGCAATGGC ATGATCTTGG 6300 CTCACTGCAA CCTCCTCTTC CTGGGTTCAA GTGATTTTCC TGCCTCAGCC TCCTGAGTAG 6360 CTGGGATTAC AGGCGCCCGC CACCACGCCT GGCTAATTTT TTGTATTTTT AGTAGAGATG 6420 GGGTTTCACC ATGTTGGCCA GGCTGGGCTC GAACTCCTGA CCTCAGGTGA TCCACCCACC 6480

TTGACCTCCC	AAAGGGCTGG	GATTACAGGC	GTGCGCCACC	ACACCTGGCC	CCCAGCTAAC	6540
TTTTAAATGT	ATTTTGTAGA	GATGAGGTCT	CACTGTGTTG	GCCAGGCTGG	TCTTGAACTT	6600
CTGAGCTCAA	GTCATTCTCC	CACCTCGGCC	TCCCAAAGTG	CTGGGATTAC	AGGCATGAGC	6660
CACCACACCT	GGCCCCTTTG	CCCATTTTAA	AAATTAGGTT	GTTTTTGTTG	TTGTTGAGTT	6720
GTAGGAGCTC	TTTGTATATT	CTGCATTTCG	GTTCCTTATT	GGATATGTGA	TTGGCATACA	6780
TTTTTTCCCA	TCCATGGATT	GCTTTTTCAT	TCTGTTATAG	TATCCTTGAT	TCACAGAAGT	6840
TTTAATATT	GATGAGGTCC	TGCTTAGTCT	GTGTTTTGTT	TTGTTGCTTG	TGCTTTTGGT	6900
GTTATATCCA	AGAAATTTTT	GCCAAATCCA	AAGTCATGAA	GCTTTGCCCT	CTGTTTCCTT	6960
CTGAGTTTTA	TAGTTTTAGG	ACTTAAATTT	AGGTTTTCGA	CCCATTTTTA	GTTAATTTTT	7020
GCAAGTGGTA	TAAGGGAGGG	GTCCAGCGTT	ATTGTTTCAC	GTGTAGATAT	ACAGTTTTCT	7080
GAGTACCATT	TGATGAAAAG	GCTGTCCATT	GAATTGCTTT	TGCAACTTTT	ATTTGGGCAT	7140
ATTTATGTGA	GTCTGTTACT	GGTTCTATAT	TTTACTCCAT	TGATCTATGT	GTCTATTCCT	7200
CTGCTAATAC	TGTCTTAAAT	ATGGTAGCTA	TATAGTAAGC	CTTAACACTG	AGTAGATAGA	7260
TTTCTCCCCT	TTTTTTGTTC	TTTTTCAAAA	TTGTCACTGG	TTTGTTTTTA	TTTTTTACTT	7320
TATGCAGATA	ATCTGTACTA	TACTTTGGTT	TCATGTATCA	AGTAGTTTGT	TCCAAGTTGT	7380
GCTTTAAGCA	GAACAAATAA	ATTTTCATAT	TGTTCTTTGT	GTTAATCTGC	AATATAAACC	7440
ТАТАССАААТ	TCTATTTTGT	GTATTTGTTT	ATTGTAGTAA	TCTGACTGAC	TCTTTTGCCT	7500
CCAGACTCAT	CTCTTTCAAG	GTCCCCAACT	GAATCTTGTT	TTAGGTGGAA	CTTAGAAGCA	7560
GTAGAAGTTA	AGAATCTATT	TCACAGCCTT	AGTAGTCTAG	TTTCATTCTC	TATATAATGT	7620
TGTCTATGCA	AGTGAGCTGC	TCTCCAGTGC	CTTAGTTTCA	CTAATGTTGG	GGAAGGTCTC	7680
TTCTCTTGTT	TTGGACTTCT	CTATCACATT	GCCTTTCTCA	AGAGAAGACA	TATAATGAAA	7740
GTTGATATCT	GGTGTTCTAG	GACTTCTTCA	GAAGCTTGCC	AGTTTTTCAA	GCTGATTTCT	7800
CTCACTGGCA	ACTCTTCAGA				GTATGTATCA	7860
		SUBST	TITUTE SHEET	(Rule 26)		

GTTTTCTACT	CATCAGCACC	CACCTACTCC	TGCCTACTGT	GTTTCTCAGA	TGTCTGCTGC	7920
CTGGCTAGCT	CATTGCTGCT	TTTGTCACTC	ATAGAGCTGT	CTTCTTCCCT	TTTTTTGGCT	7980
TTCTGCCTGA	CTTCCAGGGC	AGCTGCTCTG	TCATTGCCTG	TCTGCCATTC	TGTCTTTTTT	8040
CCCCCTACCC	CCCACAGATA	CAACATCTAC	TCTAATACCA	CACATTCTCC	ATGTTCAAAC	8100
TAACCTCATC	ACTTTCCCCA	CCACATTCCC	CAAAACTGGT	CATCCTCCAG	CTTATAGCAT	8160
TGCAGTTCAC	TGAAGTTAGA	CATCTGGGCC	TTGCTTACCT	CCAACATCTC	ATTAGCCTTC	8220
GATTCTACCC	СТАТАААТСС	TCTTCTCAGT	CTCCTTTAGA	TATTCCTGCC	CTGCTGTGAG	8280
ATCCATCTGG	TTTATTGGCT	AGATTACTTC	AGAAAGCTTC	AGTCAGTGAC	CCTCCTTACT	8340
TCAAACCCCA	CCAGTTGATC	CTTCACTCTG	CCATCAGTCA	TTGCTTCTAA	ААТСТАААТТ	8400
GTTCCATTTA	ACCTTGCTGT	GATAAAACCT	TTGGTAGTTC	TTCAGTGTGT	TCAGTGGTAA	8460
GTTAAAACTT	TCACTGTAAT	GTACAGGCCC	CTTCATGATA	TGATCGCTGC	CTCCTCGAGC	8520
CTCATTGTGT	GCATTTCCCC	GCCCCACCCT	TTCCTCACCC	ACCCTAGTCT	TTCATGTCTG	8580
CCATTTTTAC	ATTCATTTAG	CAGATATTTA	TTGAAGCCCC	CTGTGATGTC	CTTACCTAGG	8640
TCTTTCTTGT	TGCCAGGACC	AGACAGGCTT	TTTCAAGCTT	CCAAGTCATC	TCAGTTTGAA	8700
AGACTATGTC	TGACCCTTGT	CTTGGCCAAT	TACTCTTTAT	CCTTCCAAGT	TCAATGATTG	8760
TCCCACTGCA	CTCCAACCAG	AGTGAGAGAG	CAAGACCCTG	TCTCAGTAAA	TAAAAATAAA	8820
ТАААТАААТА	ААТАААТААА	ТАААТАААТС	AGCCATAATT	ТАТТТААТСА	TGTCTCTCTC	8880
CCCCATTGAT	AGACGTTAAG	GGTATTTCCA	GTATTCTTCT	CTTGAAAACA	ATGCTACATT	8940
GAATAACCTT	GTACATGGGT	CACTTTGAAA	GTATGGATAT	GTATCCGTGG	AATAAGTTTC	9000
CAGAAGTGGA	ATTGTGTCAG	AGGGGTTGTG	CATTTGTAAT	TCTGATGAAT	ATTTATAGAT	9060
TATATGAGAG	TACCTGTTTA	CTCAAACTCT	TGCCAATGCA	GCATTATCAA	AGTTTTTTAT	9120
GTTCGCCAGT	GTGATAGATT	AAAAAATGGT	ATCTCAGCCA	GGCGCAGTGG	CTCACGCCTG	9180
TAATCCCAGC	ACTTTGGGAG				ATCGAGACCA	9240
		rzgriz	THRE CHEET	(Rule 26)		

TGGGGGGCA CCTGTAGTCC CAGCTACTCG GAAGGCTGAG GCAGGAGAAT GGCATGAACC 9340 TGGGAGGCGG AGCTTGCACT GAGCCGAGAT CGCGCCACAA CATTCGAGCC TGGGCGACAG 9420 AGCGAGACTC CGTCTCAAAT AATAAAAAA AAAGATGGTA TCTCAGCATT GATTTCTTTG 9480 ATCATCAGTG AGGTTGAGCA TCTTTTCATA GATTTAAGAG AACTGTATGG TTTTTTGTGA 9540 GTTATGTTTC ATATCGTTTA CCCATTTTAC TTTTAGGCTG GAAGCAGCTG TTTTAGTGGA 9600 ATGGTGGAAC AAGAAGCCAG ATTGCCATGG AGAGCAACT CTTTCTAGAG ATTTGCTAT 9720 CTTCTTTGAA AACTTAATTG TGTTAAAAAC TGGTATGAA GGGAGGGGTT AAAGCTAGAG 9780 ATGGTGGTAG AAAAAAATC AGGGTTCCTA AAGGACTAGA ATTCCTGGAT GAATTTCAG 9840 GGAAGGGGAA AATTCTGGA TATAGTGACT GGGGAGTTAA GGGGTGCTAG TCCAATGGCT 9900 TTTATTTTCT TGGAAGGGTA GGCAAGGCCA ACAGCCACAT GTGTGGGAG AGAAGCAGG 10020 AAAGACTGCA GAAAGTGAT AGGGTTCCAC TGAAGCGAAA AATTGCTTAG 9960 AGGGGAGAGG AGGTTTGAAG GCCACGCTAT GGAGAATTGA GGAAAGACAG 10020 AAAGACTGCA GAAAGTGAT ATGGTGCCA TGAAGCACAT GTGTGGGAG AGAAGACAG 10020 AAAGACTGCA GAAAGTGCTT AGGGTTCCAC TGAAGCGGAA ATAGTGATTT GTAGTGATAC 10080 AACCCTTATG AGTTATTGA TTTTTTTTTT TTTTTAAGCA GCATCTGGCA GTCCAAGTAT 10140 AGGGCTGACA GTTTGGGATT TTTCTTTCCA TGTTGGTGTA AAAGAAGACA AGTGTAGAAA 10260 GGAAATAAAG ATAGAGCAGA GATATTGAAA AGAATTAGAG AGGGGTTCAA GAGACTGAAA 10260 GGAAATAAAG ATAGAGCAGA GATATTGAAA AGAATTAGAG AGGGGTTCAA GAGACTGAAG 10320 GCCTGGGTGA GGTCAGAGAG CAGGTTGAAAA AGAATTAGAG AGGGGTTCAA GAGACTGAAG 10320 GCCTGGGTGA GGTCAGAGAG CAGGTTGAAAA AGAATTAGAG AGGGGTTCAA GAGACTGAAG 10320 GCCTGGGTGA GGTCAGAGAG CAGGTTGAAAA AGAATTAGAA AGAATTAGAA AGAATTAAAA AGAATTAAA AGAATTAAAA AGAATTAAAAAAAA	TCCTGGCCAA	CACAGTGAAA	CCCTGTCTCT	АСТАААААТА	СААААААТТА	TCCAGGCGTG	9300
AGCGAGACTC CGTCTCAAAT AATAAAAAA AAAGATGGTA TCTCAGCATT GATTTCTTTG 9480 ATCATCAGTG AGGTTGAGCA TCTTTTCATA GATTTAAGAG AACTGTATGG TTTTTGTGA 9540 GTTATGTTTC ATATCGTTTA CCCATTTAC TTTTAGGCTG GAAGCAGCTG TTTTAGTGGA 9600 ATGGTGGAAC AAGAAGCCAG ATTGCCATGG AGAGCAACT CTTTCTAGAG ATTTGGCTAT 9660 GAAGCAGAGT AGAGACAATG ATAGCTGAAG GATGATGTA GATGCAAAGA AATTTTCAT 9720 CTTCTTTGAA AACTTAATTG TGTTAAAAAC TGGTATGAAA GGGAGGGGTT AAAGCTAGAG 9780 ATGGTGGTAG AAAAAAATGC AGGGTTCCTA AAGGATGAGA ATTTCCTGGAT GGAATTTCAG 9840 GGAAGGGGAA AATTTCTGGA TATAGTGACT GGGGAGTTAA GGGTGCTAG TCCAATGGCT 9900 TTTATTTTCT TGGAAGGGTA GGCAAGGCCA ACAGCCACAT GTGTGGGAGG AGATGGTTAG 9960 AGGGGAGAGG AGGTTTGAAG GCACCGCTAT GGAGAATTGG AGAGAGCTAA GGAAAGACAG 10020 AAAGACTGCA GAAAGTGCTT AGGGTTCCAC TGAAGCGGAA ATAGTGATTT GTAGTGATAC 10080 AACCCTTATG AGTTATTTGA TTTTTTTTT TTTTTAAGCA GCATCTGGCA GTCCAAGTAT 10140 AGGGCTGACA GTTTGGGATT TTTCTTTCCA TGTTGGTGTA AAAGAAGAAC AGTGTAGTGA 10220 AGGAAATAAAG ATAGAGCAGA GATATGAAA AGAATTAGA GAGAGAACA CATGTGAGAAA 10260 GGAAATAAAG ATAGAGCAGA GATATGAAA AGAATTAGAA GAGAGAACTA CAAGGATAGA 10380 GCCTGGGTGA GGTCAGAGAG CAGGTTGGT AGACCCAAGT TTTCTTGATT TGGTAGAAAA 10260 GCCTGGGTGA GGTCAGAGAG CAGGTTGGAT AGACCTAACA GAGAGAACTA CAAGGATAGA 10380 AAGTGTGGTT GGAGAGTGG AAGGCAAGAT TTATTCAGTA TGGGGGCTTT TCTGGGTGAT 10440 GACAGCATCT GGAGAGTGG AAGGCAAGAT TTATTCAGTA TGGGGGCTTT TCTGGGTGAT 10440 GACAGCATCT GGAGAGTGG AAGGCAAGAT TTATTCAGTA TGGGGGCTTT TCTGGGTGAT 10440 GACAGCATCT GGAGAGTCA AGGAACTGAA AGGACTGAAC AGGGATAGAC GATAAAAGCGT 10500	GTGGCGGGCA	CCTGTAGTCC	CAGCTACTCG	GAAGGCTGAG	GCAGGAGAAT	GGCATGAACC	9360
ATCATCAGTG AGGTTGAGCA TCTTTTCATA GATTTAAGAG AACTGTATGG TTTTTGTGA 9540 GTTATGTTC ATATCGTTTA CCCATTTAC TTTTAGGCTG GAAGCAGCTG TTTTAGTGGA 9600 ATGGTGGAAC AAGAAGCCAG ATTGCCATGG AGAGCAACT CTTTCTAGAG ATTTGCCTAT 9660 GAAGCAGAGT AGAGACAATG ATAGCTGAAG GATTGATGA GATGCAAAGA AATTTTCAT 9720 CTTCTTTGAA AACTTAATTG TGTTAAAAAC TGGTATGAAA GGGAGGGGTT AAAGCTAGAG 9780 ATGGTGGTAG AAAAAAATGC AGGGTTCCTA AAGGACTGAG ATTCCTGGAT GGAATTTCAG 9840 GGAAGGGGAA AATTTCTGGA TATAGTGACT GGGGAGTTAA GGGTGCTAG TCCAATGGCT 9900 TTTATTTTCT TGGAAGGGTA GGCAAGGCCA ACAGCCACAT GTGTGGGAGG AGATGGTTAG 9960 AGGGGAAGGA AGGTTTGAAG GCACCGCTAT GGAGAATTGG AGAGAGCTAA GGAAAGACAG 10020 AAAGACTGCA GAAAGTGCTT AGGGTTCCAC TGAAGCGGAA ATAGTGATTT GTAGTGATAC 10080 AACCCTTATG AGTTATTTGA TTTTTTTTT TTTTTAAGCA GCATCTGGCA GTCCAAGTAT 10140 AGGGGTGACA GTTTGGGATT TTTCTTTCCA TGTTGGTGTA AAAGAAGAAC AGTGTAGTGA 10220 AGGAAATAAAG ATAGAGCAGA GATATTGAACT GACACCAAGT TTTCTTTGATT TGGTAGAAAA 10260 GGAAATAAAG ATAGAGCAGA GATATTGAAA AGAATTAGAG AGGGGTTCAA GAGACTGAAG 10320 GCCTGGGTGA GGTCAGAGAG CAGGTGTGGT AGACACCAAGT TTTCTTTGATT TGGTAGAAAA 10260 AAGTGTGGTT GGAGAGTGG AAGGCAAGAT TTATTCAGTA TGGGGGCTTT TCTGGGTGAT 10440 GACAGCATCT GGAGACTGGG AAGGCAAGAT TTATTCAGTA TGGGGGCTTT TCTGGGTGAT 10440 GACAGCATCT GGAGACTGGC CATTGTCGTG AGGCCCCA GTGTAGCAGA GATAAAAGCGT 10500 TGTTGGAGTG AAGGAACTCA AGGAACTGAA GAGCCACAACT TTTTGGTTGTC 10560	TGGGAGGCGG	AGCTTGCACT	GAGCCGAGAT	CGCGCCACAA	CATTCGAGCC	TGGGCGACAG	9420
GTTATGTTTC ATATCGTTTA CCCATTTTAC TTTTAGGCTG GAAGCAGCTG TTTTAGTGGA 9600 ATGGTGGAAC AAGAAGCCAG ATTGCCATGG AGAGCAACT CTTTCTAGAG ATTTGCTATT 9660 GAAGCAGAGT AGAGACAATG ATAGCTGAAG GATTGATGTA GATGCAAAGA AATTTTTCAT 9720 CTTCTTTGAA AACTTAATTG TGTTAAAAAC TGGTATGAAA GGGAGGGGTT AAAGCTAGAG 9780 ATGGTGGTAG AAAAAAATCC AGGGTTCCTA AAGGACTGAG ATTCCTGGAT GGAATTTCAG 9840 GGAAGGGGAA AATTTCTGGA TATAGTGACT GGGGAGTTAA GGGTGTCTAG TCCAATGGCT 9900 TTTATTTTCT TGGAAGGGTA GGCAAGGCCA ACAGCCACAT GTGTGGGAGG AGATGGTTAG 9960 AGGGGAAGAG AGGTTTGAAG GCCACCGCTAT GGAGAATTGG AGAGAGCTAA GGAAAGACAG 10020 AAAGACTGCA GAAAGTGCTT AGGGTTCCAC TGAAGCGGAA ATAGTGATTT GTAGTGATAC 10080 AACCCTTATG AGTTATTTGA TTTTTTTTT TTTTTAAGCA GCATCTGGCA GTCCAAGTAT 10140 AGGGACTGACA GTTTGGGATT TTCTTTCCA TGTTGGTGTA AAAGAAGAAC AGTGTAGTGA 10220 AGGAAGTTAG GACAAAAGAA TGATTGAACT GACACCAAGT TTTCTTGATT TGGTAGAAAA 10260 GGAAATAAAG ATAGAGCAGA GATATTGAAA AGAATTAGAG AGGGGTTCAA GAGACTGAAG 10380 GCCTGGGTGA GGTCAGAGAG CAGGTGTGGT AGACATAACA GAGAGAACTA CAAGGATAGA 10380 AAGTGTGGT GGAGAGTGGG AAGGCAAGAT TTATTCAGTA TGGGGGCTTT TCTGGGTGAT 10440 GACAGCATCT GGAGTACAGC CATTGTCGTG AGTGGCCCAA GTGTAGCAGA GATAAAGCGT 10500 TGTTGGAGTG AAGGAAGTCA AGGAACTGAG AGGCCCCAA GTGTAGCAGA GATAAAGCGT 10560	AGCGAGACTC	CGTCTCAAAT	ААТААААААА	AAAGATGGTA	TCTCAGCATT	GATTTCTTTG	9480
ATGGTGGAAC AAGAAGCCAG ATTGCCATGG AGAGACAACT CTTTCTAGAG ATTTGGCTAT 9660 GAAGCAGAGT AGAGACAATG ATAGCTGAAG GATTGATGTA GATGCAAAGA AATTTTCAT 9720 CTTCTTTGAA AACTTAATTG TGTTAAAAAC TGGTATGAAA GGGAGGGGTT AAAGCTAGAG 9780 ATGGTGGTAG AAAAAAATGC AGGGTTCCTA AAGGACTGAG ATTCCTGGAT GGAATTTCAG 9840 GGAAGGGGAA AATTTCTGGA TATAGTGACT GGGGAGTTAA GGGTGTCTAG TCCAATGGCT 9900 TTTATTTTCT TGGAAGGGTA GGCAAGGCCA ACAGCCACAT GTGTGGGAGG AGATGGTTAG 9960 AGGGGAGAGG AGGTTTGAAG GCACCGCTAT GGAGAATTGG AGAGAGCTAA GGAAAGACAG 10020 AAAGACTGCA GAAAGTGCTT AGGGTTCCAC TGAAGCGGAA ATAGTGATTT GTAGTGATAC 10080 AACCCTTATG AGTTATTTGA TTTTTTTTT TTTTTAAGCA GCATCTGGCA GTCCAAGTAT 10140 AGGGCTGACA GTTTGGGATT TTTCTTTCCA TGTTGGTGTA AAAGAAGAAC AGTGTAGTGA 10200 AGGAAGTTAG GACAAAAGAA TGATTGAACT GACACCAAGT TTTCTTGATT TGGTAGAAAA 10260 GGAAATAAAG ATAGAGCAGA GATATTGAAA AGAATTAGAG AGGGGTTCAA GAGACTGAAG 10320 GCCTGGGTGA GGTCAGAGAG CAGGTGGTG AGACCAAAGT TCGGGGGTT TCTGGGTGAT 10440 AAGTGTGGTT GGAGAGTGG AAGGCAAGAT TTATTCAGTA TGGGGGCTTT TCTGGGTGAT 10440 GACAGCATCT GGAGTACAGC CATTGTCGTG AGTGGCCCAA GTGTAGCAGA GATAAAGCGT 10500 TGTTGGAGTG AAGGAAGTCA AGGAACTGAA GAGGCCCCAA GTGTAGCAGA GATAAAGCGT 10560	ATCATCAGTG	AGGTTGAGCA	TCTTTTCATA	GATTTAAGAG	AACTGTATGG	TTTTTTGTGA	9540
GAAGCAGAGT AGAGACAATG ATAGCTGAAG GATTGATGTA GATGCAAAGA AATTTTCAT 9720 CTTCTTTGAA AACTTAATTG TGTTAAAAAC TGGTATGAAA GGGAGGGGTT AAAGCTAGAG 9780 ATGGTGGTAG AAAAAAATGC AGGGTTCCTA AAGGACTGAG ATTCCTGGAT GGAATTTCAG 9840 GGAAGGGGAA AATTTCTGGA TATAGTGACT GGGGAGTTAA GGGTGTCTAG TCCAATGGCT 9900 TTTATTTTCT TGGAAGGGTA GGCAAGGCCA ACAGCCACAT GTGTGGGAGG AGATGGTTAG 9960 AGGGGAGAGG AGGTTTGAAG GCACCGCTAT GGAGAATTGG AGAGACTAA GGAAAGACAG 10020 AAAGACTGCA GAAAGTGCTT AGGGTTCCAC TGAAGCGGAA ATAGTGATTT GTAGTGATAC 10080 AACCCTTATG AGTTATTGA TTTTTTTTT TTTTTAAGCA GCATCTGGCA GTCCAAGTAT 10140 AGGGCTGACA GTTTGGGATT TTTCTTTCCA TGTTGGTGTA AAAGAAGAAC AGTGTAGTGA 10220 AGGAAGTTAG GACAAAAGAA TGATTGAACT GACACCAAGT TTTCTTGATT TGGTAGAAAA 10260 GGAAATAAAG ATAGAGCAGA GATATTGAAA AGAATTAGAG AGGGGTTCAA GAGACTGAAG 10320 GCCTGGGTGA GGTCAGAGAG CAGGTGTGGT AGACATAACA GAGAGAACTA CAAGGATAGA 10380 AAGTGTGGTT GGAGAGTGGG AAGGCAAGAT TTATTCAGTA TGGGGGCTTT TCTGGGTGAT 10440 GACAGCATCT GGAGTACAGC CATTGTCGTG AGTGGCCCCAA GTGTAGCAGA GATAAAAGCGT 10500 TGTTGGAGTG AAGGAAGTCA AGGAACTGAG AGGCCCCAA GTGTAGCAGA GATAAAAGCGT 10500	GTTATGTTTC	ATATCGTTTA	CCCATTTTAC	TTTTAGGCTG	GAAGCAGCTG	TTTTAGTGGA	9600
CTTCTTTGAA AACTTAATTG TGTTAAAAAC TGGTATGAAA GGGAGGGGTT AAAGCTAGAG 9780 ATGGTGGTAG AAAAAAATGC AGGGTTCCTA AAGGACTGAG ATTCCTGGAT GGAATTTCAG 9840 GGAAGGGGAA AATTTCTGGA TATAGTGACT GGGGAGTTAA GGGTGTCTAG TCCAATGGCT 9900 TTTATTTTCT TGGAAGGGTA GGCAAGGCCA ACAGCCACAT GTGTGGGAGG AGATGGTTAG 9960 AGGGGAGAGG AGGTTTGAAG GCACCGCTAT GGAGAATTGG AGAGAGCTAA GGAAAGACAG 10020 AAAGACTGCA GAAAGTGCTT AGGGTTCCAC TGAAGCGGAA ATAGTGATTT GTAGTGATAC 10080 AACCCTTATG AGTTATTTGA TTTTTTTTT TTTTTAAGCA GCATCTGGCA GTCCAAGTAT 10140 AGGGCTGACA GTTTGGGATT TTTCTTTCCA TGTTGGTGTA AAAGAAGAAC AGTGTAGTGA 10200 AGGAAGTTAG GACAAAAGAA TGATTGAACT GACACCAAGT TTTCTTGATT TGGTAGAAAA 10260 GGAAATAAAG ATAGAGCAGA GATATTGAAA AGAATTAGAG AGGGGTTCAA GAGACTGAAG 10320 GCCTGGGTGA GGTCAGAGAG CAGGTGTGGT AGACATAACA GAGAGAACTA CAAGGATAGA 10380 AAGTGTGGTT GGAGAGTGG AAGGCAAGAT TTATTCAGTA TGGGGGCTTT TCTGGGTGAT 10440 GACAGCATCT GGAGTACAGC CATTGTCGTG AGTGGCCCAA GTGTAGCAGA GATAAAGCGT 10500 TGTTGGAGTG AAGGAAGTCA AGGAACTGAG AGGCTGGCCT AGATGGGGAT TTTGGTTGTC 10560	ATGGTGGAAC	AAGAAGCCAG	ATTGCCATGG	AGAGACAACT	CTTTCTAGAG	ATTTGGCTAT	9660
ATGGTGGTAG AAAAAAATGC AGGGTTCCTA AAGGACTGAG ATTCCTGGAT GGAATTTCAG 9840 GGAAGGGGAA AATTCTGGA TATAGTGACT GGGGAGTTAA GGGTGTCTAG TCCAATGGCT 9900 TTTATTTTCT TGGAAGGGTA GGCAAGGCCA ACAGCCACAT GTGTGGGAGG AGATGGTTAG 9960 AGGGGAGAGG AGGTTTGAAG GCACCGCTAT GGAGAATTGG AGAGAGCTAA GGAAAGACAG 10020 AAAGACTGCA GAAAGTGCTT AGGGTTCCAC TGAAGCGGAA ATAGTGATTT GTAGTGATAC 10080 AACCCTTATG AGTTATTTGA TTTTTTTTTT TTTTTAAGCA GCATCTGGCA GTCCAAGTAT 10140 AGGGCTGACA GTTTGGGATT TTTCTTTCCA TGTTGGTGTA AAAGAAGAAC AGTGTAGTGA 10220 AGGAAGTTAG GACAAAAGAA TGATTGAACT GACACCAAGT TTTCTTGATT TGGTAGAAAA 10260 GGAAATAAAG ATAGAGCAGA GATATTGAAA AGAATTAGAG AGGGGTTCAA GAGACTGAAG 10320 GCCTGGGTGA GGTCAGAGAG CAGGTGTGT AGACATAACA GAGAGAACTA CAAGGATAGA 10380 AAGTGTGGTT GGAGAGTGG AAGGCAAGAT TTATTCAGTA TGGGGGCTTT TCTGGGTGAT 10440 GACAGCATCT GGAGTACACC CATTGCTGT AGTGGCCCAA GTGTAGCAGA GATAAAGCGT 10500 TGTTGGAGTG AAGGAAGTCA AGGAACTGAG AGGCTGGCCT AGATGGGGAT TTTGGTTGTC 10560	GAAGCAGAGT	AGAGACAATG	ATAGCTGAAG	GATTGATGTA	GATGCAAAGA	AATTTTTCAT	9720
GGAAGGGGAA AATTTCTGGA TATAGTGACT GGGGAGTTAA GGGTGTCTAG TCCAATGGCT 9900 TTTATTTTCT TGGAAGGGTA GGCAAGGCCA ACAGCCACAT GTGTGGGAGG AGATGGTTAG 9960 AGGGGAGAGG AGGTTTGAAG GCACCGCTAT GGAGAATTGG AGAGAGCTAA GGAAAGACAG 10020 AAAGACTGCA GAAAGTGCTT AGGGTTCCAC TGAAGCGGAA ATAGTGATTT GTAGTGATAC 10080 AACCCTTATG AGTTATTTGA TTTTTTTTT TTTTTAAGCA GCATCTGGCA GTCCAAGTAT 10140 AGGGCTGACA GTTTGGGATT TTTCTTTCCA TGTTGGTGTA AAAGAAGAAC AGTGTAGTGA 10200 AGGAAGTTAG GACAAAAGAA TGATTGAACT GACACCAAGT TTTCTTGATT TGGTAGAAAA 10260 GGAAATAAAG ATAGAGCAGA GATATTGAAA AGAATTAGAG AGGGGTTCAA GAGACTGAAG 10320 GCCTGGGTGA GGTCAGAGAG CAGGTGTGGT AGACATAACA GAGAGAACTA CAAGGATAGA 10380 AAGTGTGGTT GGAGAGTGG AAGGCAAGAT TTATTCAGTA TGGGGGCTTT TCTGGGTGAT 10440 GACAGCATCT GGAGTACAGC CATTGTCGTG AGTGGCCCCA GTGTAGCAGA GATAAAGCGT 10500 TGTTGGAGTG AAGGAAGTCA AGGAACTGAG AGGCTGGCCT AGATGGGGAT TTTGGTTGTC 10560	CTTCTTTGAA	AACTTAATTG	TGTTAAAAAC	TGGTATGAAA	GGGAGGGGTT	AAAGCTAGAG	9780
TTTATTTCT TGGAAGGGTA GGCAAGGCCA ACAGCCACAT GTGTGGGAGG AGATGGTTAG 9960 AGGGGAGAGG AGGTTTGAAG GCACCGCTAT GGAGAATTGG AGAGAGCTAA GGAAAGACAG 10020 AAAGACTGCA GAAAGTGCTT AGGGTTCCAC TGAAGCGGAA ATAGTGATTT GTAGTGATAC 10080 AACCCTTATG AGTTATTTGA TTTTTTTTT TTTTTAAGCA GCATCTGGCA GTCCAAGTAT 10140 AGGGCTGACA GTTTGGGATT TTTCTTTCCA TGTTGGTGTA AAAGAAGAAC AGTGTAGTGA 10200 AGGAAGTTAG GACAAAAGAA TGATTGAACT GACACCAAGT TTTCTTGATT TGGTAGAAAA 10260 GGAAATAAAG ATAGAGCAGA GATATTGAAA AGAATTAGAG AGGGGTTCAA GAGACTGAAG 10320 GCCTGGGTGA GGTCAGAGAG CAGGTGTGGT AGACATAACA GAGAGAACTA CAAGGATAGA 10380 AAGTGTGGTT GGAGAGTGG AAGGCAAGAT TTATTCAGTA TGGGGGCTTT TCTGGGTGAT 10440 GACAGCATCT GGAGTACAGC CATTGTCGTG AGTGGCCCAA GTGTAGCAGA GATAAAGCGT 10500 TGTTGGAGTG AAGGAAGTCA AGGAACTGAG AGGCTGGCCT AGATGGGGAT TTTGGTTGTC 10560	ATGGTGGTAG	AAAAAAATGC	AGGGTTCCTA	AAGGACTGAG	ATTCCTGGAT	GGAATTTCAG	9840
AGGGGAGAGG AGGTTTGAAG GCACCGCTAT GGAGAATTGG AGAGAGCTAA GGAAAGACAG 10020 AAAGACTGCA GAAAGTGCTT AGGGTTCCAC TGAAGCGGAA ATAGTGATTT GTAGTGATAC 10080 AACCCTTATG AGTTATTTGA TTTTTTTTT TTTTTAAGCA GCATCTGGCA GTCCAAGTAT 10140 AGGGCTGACA GTTTGGGATT TTTCTTTCCA TGTTGGTGTA AAAGAAGAAC AGTGTAGTGA 10200 AGGAAGTTAG GACAAAAGAA TGATTGAACT GACACCAAGT TTTCTTGATT TGGTAGAAAA 10260 GGAAATAAAG ATAGAGCAGA GATATTGAAA AGAATTAGAG AGGGGTTCAA GAGACTGAAG 10320 GCCTGGGTGA GGTCAGAGAG CAGGTGTGGT AGACATAACA GAGAGAACTA CAAGGATAGA 10380 AAGTGTGGTT GGAGAGTGGG AAGGCAAGAT TTATTCAGTA TGGGGGCTTT TCTGGGTGAT 10440 GACAGCATCT GGAGTACAGC CATTGTCGTG AGTGGCCCAA GTGTAGCAGA GATAAAGCGT 10500 TGTTGGAGTG AAGGAAGTCA AGGAACTGAG AGGCTGGCCT AGATGGGGAT TTTGGTTGTC 10560	GGAAGGGGAA	AATTTCTGGA	TATAGTGACT	GGGGAGTTAA	GGGTGTCTAG	TCCAATGGCT	9900
AAAGACTGCA GAAAGTGCTT AGGGTTCCAC TGAAGCGGAA ATAGTGATTT GTAGTGATAC 10080 AACCCTTATG AGTTATTTGA TTTTTTTTT TTTTTAAGCA GCATCTGGCA GTCCAAGTAT 10140 AGGGCTGACA GTTTGGGATT TTTCTTTCCA TGTTGGTGTA AAAGAAGAAC AGTGTAGTGA 10200 AGGAAGTTAG GACAAAAGAA TGATTGAACT GACACCAAGT TTTCTTGATT TGGTAGAAAA 10260 GGAAATAAAG ATAGAGCAGA GATATTGAAA AGAATTAGAG AGGGGTTCAA GAGACTGAAG 10320 GCCTGGGTGA GGTCAGAGAG CAGGTGTGGT AGACATAACA GAGAGAACTA CAAGGATAGA 10380 AAGTGTGGTT GGAGAGTGGG AAGGCAAGAT TTATTCAGTA TGGGGGCTTT TCTGGGTGAT 10440 GACAGCATCT GGAGTACAGC CATTGTCGTG AGTGGCCCAA GTGTAGCAGA GATAAAGCGT 10500 TGTTGGAGTG AAGGAAGTCA AGGAACTGAG AGGCTGGCCT AGATGGGGAT TTTGGTTGTC 10560	TTTATTTTCT	TGGAAGGGTA	GGCAAGGCCA	ACAGCCACAT	GTGTGGGAGG	AGATGGTTAG	9960
AACCCTTATG AGTTATTGA TTTTTTTTT TTTTTAAGCA GCATCTGGCA GTCCAAGTAT 10140 AGGGCTGACA GTTTGGGATT TTTCTTTCCA TGTTGGTGTA AAAGAAGAAC AGTGTAGTGA 10200 AGGAAGTTAG GACAAAAGAA TGATTGAACT GACACCAAGT TTTCTTGATT TGGTAGAAAA 10260 GGAAATAAAG ATAGAGCAGA GATATTGAAA AGAATTAGAG AGGGGTTCAA GAGACTGAAG 10320 GCCTGGGTGA GGTCAGAGAG CAGGTGTGGT AGACATAACA GAGAGAACTA CAAGGATAGA 10380 AAGTGTGGTT GGAGAGTGGG AAGGCAAGAT TTATTCAGTA TGGGGGCTTT TCTGGGTGAT 10440 GACAGCATCT GGAGTACAGC CATTGTCGTG AGTGGCCCAA GTGTAGCAGA GATAAAGCGT 10500 TGTTGGAGTG AAGGAAGTCA AGGAACTGAG AGGCTGGCCT AGATGGGGAT TTTGGTTGTC 10560	AGGGGAGAGG	AGGTTTGAAG	GCACCGCTAT	GGAGAATTGG	AGAGAGCTAA	GGAAAGACAG	10020
AGGGCTGACA GTTTGGGATT TTTCTTTCCA TGTTGGTGTA AAAGAAGAAC AGTGTAGTGA 10200 AGGAAGTTAG GACAAAAGAA TGATTGAACT GACACCAAGT TTTCTTGATT TGGTAGAAAA 10260 GGAAATAAAG ATAGAGCAGA GATATTGAAA AGAATTAGAG AGGGGTTCAA GAGACTGAAG 10320 GCCTGGGTGA GGTCAGAGAG CAGGTGTGGT AGACATAACA GAGAGAACTA CAAGGATAGA 10380 AAGTGTGGTT GGAGAGTGGG AAGGCAAGAT TTATTCAGTA TGGGGGGCTTT TCTGGGTGAT 10440 GACAGCATCT GGAGTACAGC CATTGTCGTG AGTGGCCCAA GTGTAGCAGA GATAAAGCGT 10500 TGTTGGAGTG AAGGAAGTCA AGGAACTGAG AGGCTGGCCT AGATGGGGAT TTTGGTTGTC 10560	AAAGACTGCA	GAAAGTGCTT	AGGGTTCCAC	TGAAGCGGAA	ATAGTGATTT	GTAGTGATAC	10080
AGGAAGTTAG GACAAAAGAA TGATTGAACT GACACCAAGT TTTCTTGATT TGGTAGAAAA 10260 GGAAATAAAG ATAGAGCAGA GATATTGAAA AGAATTAGAG AGGGGTTCAA GAGACTGAAG 10320 GCCTGGGTGA GGTCAGAGAG CAGGTGTGGT AGACATAACA GAGAGAACTA CAAGGATAGA 10380 AAGTGTGGTT GGAGAGTGGG AAGGCAAGAT TTATTCAGTA TGGGGGCTTT TCTGGGTGAT 10440 GACAGCATCT GGAGTACAGC CATTGTCGTG AGTGGCCCAA GTGTAGCAGA GATAAAGCGT 10500 TGTTGGAGTG AAGGAAGTCA AGGAACTGAG AGGCTGGCCT AGATGGGGAT TTTGGTTGTC 10560	AACCCTTATG	AGTTATTTGA	TTTTTTTTT	TTTTTAAGCA	GCATCTGGCA	GTCCAAGTAT	10140
GGAAATAAAG ATAGAGCAGA GATATTGAAA AGAATTAGAG AGGGGTTCAA GAGACTGAAG 10320 GCCTGGGTGA GGTCAGAGAG CAGGTGTGT AGACATAACA GAGAGAACTA CAAGGATAGA 10380 AAGTGTGGTT GGAGAGTGGG AAGGCAAGAT TTATTCAGTA TGGGGGCTTT TCTGGGTGAT 10440 GACAGCATCT GGAGTACAGC CATTGTCGTG AGTGGCCCAA GTGTAGCAGA GATAAAGCGT 10500 TGTTGGAGTG AAGGAAGTCA AGGAACTGAG AGGCTGGCCT AGATGGGGAT TTTGGTTGTC 10560	AGGGCTGACA	GTTTGGGATT	TTTCTTTCCA	TGTTGGTGTA	AAAGAAGAAC	AGTGTAGTGA	10200
GCCTGGGTGA GGTCAGAGAG CAGGTGTGT AGACATAACA GAGAGAACTA CAAGGATAGA 10380 AAGTGTGGTT GGAGAGTGGG AAGGCAAGAT TTATTCAGTA TGGGGGCTTT TCTGGGTGAT 10440 GACAGCATCT GGAGTACAGC CATTGTCGTG AGTGGCCCAA GTGTAGCAGA GATAAAGCGT 10500 TGTTGGAGTG AAGGAAGTCA AGGAACTGAG AGGCTGGCCT AGATGGGGAT TTTGGTTGTC 10560	AGGAAGTTAG	GACAAAAGAA	TGATTGAACT	GACACCAAGT	TTTCTTGATT	TGGTAGAAAA	10260
AAGTGTGGTT GGAGAGTGGG AAGGCAAGAT TTATTCAGTA TGGGGGCTTT TCTGGGTGAT 10440 GACAGCATCT GGAGTACAGC CATTGTCGTG AGTGGCCCAA GTGTAGCAGA GATAAAGCGT 10500 TGTTGGAGTG AAGGAAGTCA AGGAACTGAG AGGCTGGCCT AGATGGGGAT TTTGGTTGTC 10560	GGAAATAAAG	ATAGAGCAGA	GATATTGAAA	AGAATTAGAG	AGGGGTTCAA	GAGACTGAAG	10320
GACAGCATCT GGAGTACAGC CATTGTCGTG AGTGGCCCAA GTGTAGCAGA GATAAAGCGT 10500 TGTTGGAGTG AAGGAAGTCA AGGAACTGAG AGGCTGGCCT AGATGGGGAT TTTGGTTGTC 10560	GCCTGGGTGA	GGTCAGAGAG	CAGGTGTGGT	AGACATAACA	GAGAGAACTA	CAAGGATAGA	10380
TGTTGGAGTG AAGGAAGTCA AGGAACTGAG AGGCTGGCCT AGATGGGGAT TTTGGTTGTC 10560	AAGTGTGGTT	GGAGAGTGGG	AAGGCAAGAT	TTATTCAGTA	TGGGGGCTTT	TCTGGGTGAT	10440
AMERICAN AND AMERICAN CAMPAGARAN AND AMERICAN CAMPAGARAN CAMPAGARA	GACAGCATCT	GGAGTACAGC	CATTGTCGTG	AGTGGCCCAA	GTGTAGCAGA	GATAAAGCGT	10500
ATCCATGAGG ATATTGAAGT CATCCAGGAG AATAGCAGGC CTGGGGGACA GGAAGGAAAC 10620	TGTTGGAGTG	AAGGAAGTCA	AGGAACTGAG	AGGCTGGCCT	AGATGGGGAT	TTTGGTTGTC	10560
	ATCCATGAGG	ATATTGAAGT	CATCCAGGAG	AATAGCAGGC	CTGGGGGACA	GGAAGGAAAC	10620

TGAGCCACTT ACAGTGT	CTT CAGTGATAGG	AAAGCACAGG	GCAAAAAGCT	TTCAAGAACA	10680
GGGACTGTTA AGCCGGG	TAC AGTGGCTCAC	ACCTATAATC	CTAGCATTTT	GGGAGGCCAA	10740
GGCGGGTGGA TCACTTG	AGG TCAGGAGTTC	AAGACCAGCC	TGGCCAACAT	GGTGAAACCC	10800
CATCTCTACT AAAAATA	CAA AAATTAGCCA	GGCATGGTGG	CACGCGCCTG	TAATCCCAGC	10860
TACTTGGGAG GCTGAGG	CAG GAGAATTGCT	TGAACCTAGG	AGGCGGAGGT	GGCAGTGAGC	10920
CTAGATCGCG CCCTTGG	CTG CGATCCAGAC	TTCACTCCAG	CCTGGGTGAC	AGAGCAAGAC	10980
TCTGTCTCAA AAAAAAA	AAA GAAAATCAGA	CTCTTAATAT	TTGTAAAGAA	GTAGTCCTTG	11040
AGCTACTACT TAAGTCT	AGA AAGAGTTGAT	ATTCTTGTTT	TAAGAGTGTT	AGGGCACTTT	11100
GGGAGGCTGA GGCAGGT	GGA TCACTTGAGC	CCAGGAGTTC	CAGACCAGCC	TGAGCAATAT	11160
GGGGAAACCT TGTCTCT	АСТ АААААТАСАА	AAATTAACCA	GGCATGTGGT	ACGTACCTGT	11220
AGTCCCAGCC ACTTGGG	ACG CTGAGGTGGG	AGGATCACCT	GAGCCCAGGA	AATGGAGGTT	11280
GCAGTGAGCC AAGATTG	CGT GACTGTACTC	TAGCCTGGGC	AACAGAGCAA	GACTCTGTCT	11340
CAAAAAAAAA AAGGGCG	GGG ATTATCATAG	TGCCATTATT	ATTATGAGTT	TATGATGGCT	11400
TTCTCTAAGC ACCTTTT	ACA TTCGGCATTT	ATTCAGTACC	TATTAAGCAT	CAAGGAGTCC	11460
AGAAAAATT TTATATA	ТАА АТАТАТАТА	AATATGTAAA	TATATATATG	CATATGCTTC	11520
CCTATCTCAG GAAGGAA	ATA TGTGAACATC	AGGAACCGAA	GTCTACTCAG	TTACATGCCA	11580
TTGGATATAT CACACAA	AGT GCTGAGGGAA	CTCAGAAGGC	TCATTATATC	TGGGGAGTGG	11640
GAAGGAGGCA CAGAGAT	GTG CTTTGGGAAG	ТТТАААТТАА	AATAGCAAAT	GGGGAAAATG	11700
AAGACACACC AGACAGG	GCA CAAGCAAAGA	GACATGAAAG	AGTAAGTCAT	GTGTTTGAGG	11760
ATCTGGGGAT CCACTAG	TTC TAGAGCGGCC	GCCACCGCGT	AGCAGTTACG	G	11811

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(2) INFORMATION FOR SEQ ID NO:8:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 1241 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

7	CGTGATGCG	GTATTTTCTC	CTTACGCATC	TGTGCGGTAT	TTCACACCGC	ATAGATCCGT	60
C	GAGTTCAAG	AGAAAAAAA	AGAAAAAGCA	AAAAGAAAAA	AGGAAAGCGC	GCCTCGTTCA	120
G	GAATGACACG	TATAGAATGA	TGCATTACCT	TGTCATCTTC	AGTATCATAC	TGTTCGTATA	180
C	CATACTTACT	GACATTCATA	GGTATACATA	TATACACATG	TATATATATC	GTATGCTGCA	240
C	CTTTAAATA	ATCGGTGTCA	CTACATAAGA	ACACCTTTGG	TGGAGGGAAC	ATCGTTGGTA	300
C	CATTGGGCG	AGGTGGCTTC	TCTTATGGCA	ACCGCAAGAG	CCTTGAACGC	ACTCTCACTA	360
C	CGGTGATGAT	CATTCTTGCC	TCGCAGACAA	TCAACGTGGA	GGGTAATTCT	GCTAGCCTCT	420
C	SCAAAGCTTT	CAAGAAAATG	CGGGATCATC	TCGCAAGAGA	GATCTCCTAC	TTTCTCCCTT	480
7	rgcaaaccaa	GTTCGACAAC	TGCGTACGGC	CTGTTCGAAA	GATCTACCAC	CGCTCTGGAA	540
1	AGTGCCTCAT	CCAAAGGCGC	AAATCCTGAT	CCAAACCTTT	TTACTCCACG	CACGGCCCCT	600
1	AGGGCCTCTT	TAAAAGCTTG	ACCGAGAGCA	ATCCCGCAGT	CTTCAGTGGT	GTGATGGTCG	660
7	rctatgtgta	AGTCACCAAT	GCACTCAACG	ATTAGCGACC	AGCCGGAATG	CTTGGCCAGA	720
(GCATGTATCA	TATGGTCCAG	AAACCCTATA	CCTGTGTGGA	CGTTAATCAC	TTGCGATTGT	780
(FTGGCCTGTT	CTGCTACTGC	TTCTGCCTCT	TTTTCTGGGA	AGATCGAGTG	CTCTATCGCT	840
1	AGGGGACCAC	CCTTTAAAGA	GATCGCAATC	TGAATCTTGG	TTTCATTTGT	AATACGCTTT	900
2	ACTAGGGCTT	TCTGCTCTGT	CATCTTTGCC	TTCGTTTATC	TTGCCTGCTC	ATTTTTAGT	960
1	ATATTCTTCG	AAGAAATCAC	ATTACTTTAT			TGATAATGCC	1020
			דסמווס	TTTUE CHEET	(Rule 26)		

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AATCGCTAAG	AAAAAAAAAG	AGTCATCCGC	TAGGTGGAAA	AAAAAAAATG	AAAATCATTA	1080
CCGAGGCATA	ААААААТАТА	GAGTGTACTA	GAGGAGGCCA	AGAGTAATAG	AAAAAGAAAA	1140
TTGCGGGAAA	GGACTGTGTT	ATGACTTCCC	TGACTAATGC	CGTGTTCAAA	CGATACCTGG	1200
CAGTGACTCC	TAGCGCTCAC	CAAGCTCTTA	AAACGGGAAT	Т		1241

(2) INFORMATION FOR SEQ ID NO:9:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 1701 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

ATAAAAAACA	GTTAATTAGG	AGTATCTAGG	TTATGTGAAG	CATTCATCAC	CYYCCTAYTG	60
RCAGAAAWTW	TCGWTAGGCA	AATTTTATAT	TWTAAGTAAC	TTTAACATGA	ACACTTCTTA	120
AACTTTGGCT	CATAATTTCA	CAAAAATTAG	GCTGCAAGTC	ACCATATTCA	TCAGATACTG	180
GCAGACACTA	ACTTCTGCGG	CTATGACACC	AAGCAATACT	GAAATCTCTT	ATCTTTCCAG	240
GGGGGTTGTT	CATGTATTCA	GTGTTTGCAA	AGAGTTCCTG	CTGAGCTAAA	CACAGTCCAC	300
TGTGCACTCT	ACGAAAGAGT	CCATGAGACA	AGCATGGGGG	AGGGTAGGAA	GTTTAATACT	360
TTCACAATGC	CTGTGGAGAC	GCTGGCAGTG	ATGAAAGCCT	AGAAAACTCA	TGAAAGGACC	420
TTTTATGAGC	AGGGTGAATG	TAGAGCACAA	AAGCAAAGTC	AGATGACCCA	CTTAAAGCTT	480
TGCCTTTACT	GATGAGAATT	CATTCTCATT	CCAGATTAGT	CTCTCTCTAG	AAAAAGCAAA	540
ССТТАТАТАА	GAGTTGGAAA	ATTAAGATAC	AGGAAGTATA	ATTCTACTAA	ATTCCAGTTT	600
TTCCTTCTCA	AATATCAGCC	TAAGTCCTAA	GGTCTGTGGC	CAAAGACAGA	AAATACAAGG	660
CGCTGAGAAA	TATGCTATTT	ATCTTGGTGT	AACAATCTCT	GACTGTTGGG	GTTTGAGGAA	720
ATTTAAGCTC	TACAATCCAT	AGATCAGACC	AGAAGTTTAG	GGTAGTAATA	TTATGAGAGG	780

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AAATAGTTTC	TTTCTGGAAC	TTATATAAAG	CAAATAACTG	GTAAACCTGA	TTTGCAAGGT	840
AATGACAGTC	CAAGTTCCTT	CAAAGCAGAG	AACCACTTAT	TTGCTCATTC	ATTCAACTAA	900
GTTCCTTGTC	TTGTGCCAGG	CTGGAGAGAG	AAAGCAGCTC	CTGTCCTCAA	GGAGCTCACA	960
TCTCAGGCAT	CTTCTCACCC	TCCTTTCTCA	TGTTAACCAA	AACATTTCAG	GTTCATCAAT	1020
GAAACTCTTC	ATCCAGGAGG	CAGATAAAAT	GGCTTCTCTT	CATTTTGATT	CATTTACTCT	1080
ТТСТТТТАТТ	ТАТТТТАТТА	ттаттаттт	тттттттст	GAGAAGGAGT	CTCGCTCTGT	1140
TGCCCAGGCT	GGAGTGCAGT	GGCGTGATCT	CGGCTCACTG	CAACCTCTGC	CTCCCGGGTT	1200
CAAGCGATTC	TCCTGCCTCA	GCCTCCCAAG	TAGCTGGGAT	TACAGGCATG	CGCCACCACG	1260
CCCGGCTAAT	TTTTGTAATT	TTAGTAGAGA	TGGGGTTTCA	CCATGTTGGT	CAGGCTGGTG	1320
TCAAACTCCT	GACCTTGTGA	TCCGCCTGCC	TCAGCCTCCC	AAAGTGCTGG	GATTACAGGT	1380
GTGAGCCACC	ATGCCCGGCC	TACTCTTTCT	TTTAAACAGA	GAAATAAGAT	GGAATATTTT	1440
TATCCCATCT	TTTCTTCTGT	AAAAAATTAA	GGAATACGAA	GAAACTTGAC	ATAGTCTCTC	1500
TCCTCATGTG	CTCTCTTACT	TCCCATCCCA	ATTCCATGTT	TGCTCTCTTT	TTCCTCTCTC	1560
CTTCTGTTTT	GTTGTGAATG	AAGAATTAGG	TAACTAGTCC	AAAACTACAG	AGCTACACCT	1620
GGAGCCTAGA	TTCACTGGTA	GCAAATCACT	AATTTTCTGA	AGGTAAATGG	GAGAAAATGG	1680
GGGTGGGGG	AAACTCATTA	A				1701

(2) INFORMATION FOR SEQ ID NO:10:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 1293 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

GGAGATAATA AGTATACACT ATGTGTGAAG GGGGTGTCTC TATTGTTGTT GTGGCGATTA 60

SUBSTITUTE SHEET (Rule 26)

120	CACGCTTTGT	TTGGGGGACT	AAGTCCGAGA	GTTGTGAATA	TTTACACCTG	GGTGAGTAAT
180	AGGTTGGGG	TAATAGTTAA	CGTGCCCAAT	GTTTTGCCCC	AGGACAATGG	AGAGTCTCCC
240	AAAAGGTTGA	ATGCCCCCAA	GGCTCTTGAA	AACTGGATAG	CCCTTATTCC	CTTTTCGATT
300	ACCTGAAGTG	CTACCCTTGA	TCCCGCTAGA	GAGGGAATTC	ACACGTCAAA	CCCTTTCCCC
360	TCCCTTAAAA	TGTGAATCAA	CATCCCCCAC	AGCTTGTTAG	AGGGTATTCT	CAGTCCCTAC
420	GCATATATTT	ААТАТААТАА	ACTAATCTTT	GTAATAGAGG	TAAGATGTAT	ТАААССТАТА
480	GTTCCAAGAC	GGGGGGATAT	GGGGGGGGT	CCCTTATCTG	CGGTACTACC	AATATAATTT
540	TATTTCATTC	ACGTAAACTG	ACTGAACCCT	CACAGATGGT	TGCCTGAAAC	TCCCAGTAGA
600	CAGGGTCTAT	ACTAAAAGAA	TAGGGTAACC	TTGTAATCTG	AGGCTATGTG	CTATACATGC
660	AAAAAGCAAG	CTATCAATCC	GTAAAAAAGT	AGCTAGGATA	GAGGGAAAAA	AACTTGGCAA
720	TATTATTAGT	TATTGTATTT	TTATTATAAG	TGCTGGCATA	AAAAGGAACA	AAAAAAGAGA
780	CTATGTATGT	TTTATCACAG	TAAATTAAAC	GCCTAATTTA	TTTTTACTGT	TATTGTTAAT
840	TATAATGCTT	GGTCTTGGAA	ATCCACTGGG	GGTTTTAGGC	ATATATCTGT	ATAGGAAAAT
900	ATACATTAAT	CATATTAAGT	TATTATATGT	ACTGTAATTA	AGAAGGTACT	CCCCCAGATA
960	TATAGAATTA	АТАТАТАТСА	АТТАТАТТАА	ТТАТАТАТТА	AGTAGCCACA	TCTACTAGGT
1020	GGAGGAGTTG	GGAGATTCAG	CTGGCAGGCT	ATAGAAGAGG	TTGACTCATA	TTTTAAGGAA
1080	AGGTCAGCCT	TGCTTGGGGG	AATTCCCTCT	ACTGCCAGAG	GCAAAGGCAG	CATTTCAAGT
1140	СТАТАТТААА	ААТАТАТТАА	GAAAGCAAAG	GAGGAAAATA	TCAAATCTTT	TTTGTTCTAT
1200	AAGCCCTCAA	СТААТААТАА	ATTATAAAGC	АААТАСАААА	GTTCCAATTA	САААСТАААТ
1260	TGAACATACA	ATAGAAAAGT	GCTTAAGGAT	ACATTTTTAA	TTTAAAAGAG	ттататсстс
1293			TAG	TGCAAAATAC	AAAATAAGCA	AGCATGGAAT

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(2)	INFORMATION	FOR	SEQ	ID	NO:	11:
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- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 529 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

GCTGAGGTGC	ATCGCGGTGG	CGGACGCTCT	AGAACTAGTG	GATCCCCAAA	CAAAACCTGT	60
CCCTGCTAAT	GATGGTAGAC	CCAATCAGAT	CCCCGGAGAA	GCCGAAATAC	GGAAACCATA	120
TCAGCATACG	CATGGCATAC	ATAGAACCCC	ATACATGGAT	TGCTTACTCA	GCCAGATATA	180
GAAATCTATC	TTCACGATAG	AGATATATAT	ATATAGACAC	ACTGCATATA	CAGATGTGAG	240
ATGGAGGCTC	ACTCTGCCAC	CCGTGCTGGA	TCTACAGTGG	CACAAGCTCA	GTCCACAGTC	300
ACGTCGATCT	GCCGGGCGTG	ACCGACTGAG	ATGCAGCGGC	CTCGGGCGTA	GCTGTGAGTA	360
CACGCACCAG	TCATCGCGAC	TGGCTGCAAG	TGGTATAAGC	GGAGGGGACA	GGGTTACAGC	420
ATGACGGCTA	GGCAGGCCGC	AAACTGAGGA	CCACAAGAGT	GCCACGCTGC	CCGAACGCAT	480
GCAGTGGCGA	GATTACATGG	GGCAGCCACT	AGAGCCGCCG	TATCAGAAA		529

(2) INFORMATION FOR SEQ ID NO:12:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 18073 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

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ACTECTGAN ATGGAGCTCT GAGATGTTGG AGTAGANATT TGGANACCAG AGAGAGAGGT AAGGGTAGTG TTGTTGCAAC ATGCATTGTA TATGGGGGGT CGGGAAGTCA CAGGAGTTTG AAGGGTAGTG TTGTTGCAAC ATGCATTGTA TATGGGGGGT CGGGAAGTCA CAGGAGTTTG CCTCAAAGTC TTTCTCGGAG ACGGATGAGG TTTTCACTGT GATTTTCCTG GTCGTGGTCT ATGGATATAG TACCTGTTAG TGACATGGAT CTTCTTAACT TCTGATGTGT CTTTTCCTCC 300 CTAGTGTACG CATACCAATT CTCTCCACAG CTTCCATCAC CATGCATTTG TTCTTTCCC 360 TTGTTCTTGT ATTACCTTC TGGAAAGGAA TTTTTATTGT AGGCTAATTG TTACTCCCAC CAGTATTTAA CCACTGGATA TTTCATATGA TGACTCTCT CTGATTTGGA AAATAAAAAT 480 GTAATCTCAT TATATTCATT TGATTAGGAG GGACAGTCAA CACTTCTTTG TGTATTTTCT 540 TAGCTGTTCG TTTTTCCGT CTGTAAATTA TCTGTTTAGG TCCTTCAGAT TTTTCAAAAT 600 TGGACTGTTA TGTTTTCAGT ATTGTTATGA GTTCTTGTT CAATTATTA TGACAGTTCA 660 TTTTCTTTTT TAAAATAGAC TTTTTTTTTC TTAGAGAAAA AAGAAAAAAT AAAAATTAAA 720 ATAGACTTTG TGTTTTAGAG AGTTCAGGT TCACAGCAAA ATTGATCAAA AAGTATGAGA 661 AGTTCCGGCC AGGCGCGGT GCTCACACCT GTAATCCCAG CACTTTGGAA ACCCCATGTC 900 TACTAACAAT ACACAAATTA GCTGGGTGTG GTGGTGCACA CCTGTAACTG TACCTACTCA 960 GGAGGCTGAG GCAGAAGAAT CTCTTGAACC TGGGAGGTG AGGTTACAGT TACCTACTCA 960 GGAGGCTGAG GCAGAAGAAT CTCTTGAACC TGGGAGGTG AGGTTACAGT GACCCACGTT 1020 CATGCCCCTG CACTCCAGCC TGGGCAACAG AGTGAGACT CGTCCTAAAA AAAGAAAGAA 1080 AGAAAATATA GAGCAATCCT AAATACCAC TGTGCCCAAC ACCTGCACAG CCTCCTCATT 1140 ATCCACCATCC TACACCACTG TGGTACCTTT GTTGCCCAAC ACCTGCACAG CCTCCCTCATT 1140 ATCCACCATCC TACACCACTG TGGTACCTTT GTTGCACAAC ACCTGCACAG CCTCCCTCATT 1140 ATCCACCATCC TACACCACTG TGGTACCTTT GTTGCACAAC ACTGCACAAC ATTGACTCCT 1200 CATTATCACC CAAGCTTTG TGTTGTACAT TCTGTAGATT TGGACAAATG TATAATGACA 1260 TGTGTCTACC CAAGCTTTG TGTTGTACAT TCTGTAGATC CCCTGGACGT CCCTCTCCC 1320 ACCTGGTTAC TCCTCTCC CTTTTCCTAA CTGCACAAC ACTGCATGTTT TTTTTTTTTT	AGCGCGTGCG	CCGCTCTAGA	ACTAGTGGAT	CCCCGAGGA	GTGAGGAGGA	CCTCAACCCT	60
CCTCAAAGTC TTTCTCGGAG ACGGATGAGG TTTTCACTGT GATTTTCCTG GTCGTGGTCT ATGGATATAG TACCTGTTAG TGACATGGAT CTTCTTAACT TCTGATGTGT CTTTTCCTCC 300 CTAGTGTACG CATACCAATT CTCTCCACAG CTTCCATCAC CATGCATTTG TTCTTTTCCCC 360 TTGTTCTTGT ATTACCTTC TGGAAAGGAA TTTTTATTGT AGGCTAATTG TTACTCCCAC CAGTATTTAA CCACTGGATA TTTCATATGA TTGATCTCT CTGATTTGGA AAATAAAAAT 480 GTAATCTCAT TATATCATT TGATTAGTGG GGACAGTCAA CACTTCTTTG TGTATTTTCT 540 TAGCTGTTCG TTTTTCCGT CTGTAAATTA TCTGTTTAGG TCCTTCAGAT TTTTCAAAAT 600 TGGACTGTTA TGTTTTCAGT ATTGTTATGA GTTCTTGTT CAATTATTA TGACAGTTCA 660 TTTTCTTTTT TAAAATAGAC TTTTTTTTC TTAGAGAAATA AAGAAAAAAT AAAAATTAAA 720 ATAGACTTTG TGTTTTAGAG AGTTTCAGGT TCACAGCAAA ATTGATCAAA AAGTATGAGG 661 GGCAGATCAC AAGGTCAGGA GTTTAAGACC AGCCTGGCCA ATATGATGAA ACCCCATGTC 900 TACTAACAAT ACACAAATTA GCTGGGTGTG GTGGTGCACA CCTTGTAACTG TACCTACTCA 960 GGAGGCTGAG GCAGAAGAAT CTCTTGAACC TGGGAGGTG AGGTTACAGT GAGCCACAGT 1020 CATGCCCCTG CACTCCAGCC TGGGCAACAG AGTGGGCCAACAG CCTCCTCATT 1140 ATCCACATCC TACACCACTG TGGTACCTT GTTGCCCAAC ACCTGCACAG CCTCCTCATT 1140 ATCCACATCC TACACCACTG TGGTACCTT GTTGCAATTG ATGGACCAAC ATTGATCACA 1260 CATTATCACC CAAGCTTTGG TGTTGTACAT TCTGTAGATT TGGACAAATG TATAATGACA 1260 TGTGTCTTACC ATTGTAGTAT CATACAGAAG AATTGAACTG CCCTGACAGT CCTCTGCTCC 1320	ACTTCCTGAA	ATGGAGCTCT	GAGATGTTGG	AGTAGAAATT	TGGAAACCAG	AGAGAGAAGT	120
ATGGATATAG TACCTGTTAG TGACATGGAT CTTCTTAACT TCTGATGTGT CTTTTCCTCC 300 CTAGTGTACG CATACCAATT CTCTCCACAG CTTCCATCAC CATGCATTTG TTCTTTTCCC 360 TTGTTCTTGT ATTACCTTTC TGGAAAGGAA TTTTTATTGT AGGCTAATTG TTACTCCCAC CAGTATTTAA CCACTGGATA TTTCATATGA TTGATCTCTT CTGATTTGGA AAATAAAAAT 480 GTAATCTCAT TATATCATT TGATTAGTGG GGACAGTCAA CACTTCTTTG TGTATTTTCT 540 TAGCTGTTCG TTTTTCCGT CTGTAAATTA TCTGTTTAGG TCCTTCAGAT TTTTCAAAAT 600 TGGACTGTTA TGTTTTCAGT ATTGTTATGA GTTCTTGTTT CAATTATTA TGACAGTTCA 660 TTTTCTTTTT TAAAATAGAC TTTTTTTTC TTAGAGAAAT AAGAAAAAAT AAAAATTAAA 720 ATAGACTTTG TGTTTTAGAG AGTTTCAGGT TCACAGCAAA ATTGATCAAA AAGTATGAG 840 AGTTCCGGCC AGGCGGGGG GCTCACACCT GTAATCCCAG CACTTTGGAA GGCCAAGGTG 840 GGCAGATCAC AAGGTCAGGA GTTTAAGACC AGCCTGGCCA ATATGATGAA ACCCCATGTC 900 TACTAACAAT ACACAAATTA GCTGGGTGTG GTGGTGCACA CCTGTAACTG TACCTACTCA 960 GGAGGCTGAG GCAGAAGAAT CTCTTGAACC TGGGAGGTG AGGTTACAGT GAGCCACAGT 1020 CATGCCCCTG CACTCCAGCC TGGGCAACAG AGTGGAGCTC CGTCCTAAAA AAAGAAAAGA	AAGGGTAGTG	TTGTTGCAAC	ATGCATTGTA	TATGGGGGGT	CGGGAAGTCA	CAGGAGTTTG	180
CTAGTGTACG CATACCAATT CTCTCCACAG CTTCCATCAC CATGCATTG TTCTTTTCCC 360 TTGTTCTTGT ATTACCTTTC TGGAAAGGAA TTTTTATTGT AGGCTAATTG TTACTCCCAC 420 CAGTATTTAA CCACTGGATA TTTCATATGA TTGATCTCTT CTGATTTGGA AAATAAAAAT 480 GTAATCTCAT TATATTCATT TGATTAGTGG GGACAGTCAA CACTTCTTTG TGTATTTTCT 540 TAGCTGTTCG TTTTTCCCGT CTGTAAATTA TCTGTTTAGG TCCTTCAGAT TTTTCAAAAT 600 TGGACTGTTA TGTTTTCAGT ATTGTTATGA GTTCTTGTTT CAATTATTA TGACAGTTCA 660 TTTTCTTTTT TAAAATAGAC TTTTTTTTC TTAGAGAAAT AAGAAAAAAT AAAAATTAAA 720 ATAGACTTTG TGTTTTAGAG AGTTTCAGGT TCACAGCAAA ATTGATCAAA AAGTATGGAG AGGTCCGGCC AGGCGGGTG GCTCACACCT GTAATCCCAG CACTTTGGAA GGCCAAGGTG 840 GGCAGATCAC AAGGTCAGGA GTTTAAGACC AGCCTGGCCA ATATGATGAA ACCCCATGTC 960 GAGGCTGAG GCAGAAGAAT CTCTTGAACC TGGGAGGTG AGGTTACAGT GAGCCACAGT 1020 CATGCCCCTG CACTCCAGCC TGGGCAACAG AGTGAGACTC CGTCCTAAAA AAAGAAAAGA	CCTCAAAGTC	TTTCTCGGAG	ACGGATGAGG	TTTTCACTGT	GATTTTCCTG	GTCGTGGTCT	240
TTGTTCTTGT ATTACCTTC TGGAAAGGAA TTTTTATTGT AGGCTAATTG TTACTCCCAC 420 CAGTATTTAA CCACTGGATA TTTCATATGA TTGATCTCTT CTGATTTGGA AAATAAAAAT 480 GTAATCTCAT TATATTCATT TGATTAGTGG GGACAGTCAA CACTTCTTTG TGTATTTCT 540 TAGCTGTTCG TTTTTCTCGT CTGTAAATTA TCTGTTTAGG TCCTCAGAT TTTTCAAAAT 600 TGGACTGTTA TGTTTTCAGT ATTGTTATGA GTTCTTTTT CAATTATTTA TGACAGTTCA 660 TTTTCTTTTT TAAAATAGAC TTTTTTTTC TTAGAGAAAT AAGAAAAAAT AAAAATTAAA 720 ATAGACTTTG TGTTTTAGAG AGTTCAGGT TCACAGCAAA ATTGATCAAA AAGTATGGAG 780 AGTTCCGGCC AGGCGCGGTG GCTCACACCT GTAATCCCAG CACTTTGGAA GGCCAAGGTG 840 GGCAGATCAC AAGGTCAGGA GTTTAAGACC AGCCTGGCCA ATATGATGAA ACCCCATGTC 900 TACTAACAAT ACACAAATTA GCTGGGTGTG GTGGTGCACA CCTGTAACTG TACCTACTCA 960 GGAGGCTGAG GCAGAAGAAT CTCTTGAACC TGGGAGGTGG AGGTTACAGT GAGCCACAGT 1020 CATGCCCCTG CACTCCAGCC TGGGCAACAG AGTGAGACTC CGTCCTAAAA AAAGAAAGAA 1080 AGAAAATATA GAGCATTCCT AAATACCACC TGTCCCCAAC ACCTGCACAG CCTCCTCATT 1140 ATCCACATCC TACACCACTG TGGTACCTTT GTTGCAATTG ATGGACCAAC ATTGACTCCT 1200 CATTATCACC CAAGCTTTGG TGTTGTACAT TCTGTAGATT TGGACAAATG TATAAATGACA 1260 TGTGTCTACC ATTGTAGTAT CATACAGAAG AATTGACTG CCCTGACAGT CCTCTCTCCC 1320	ATGGATATAG	TACCTGTTAG	TGACATGGAT	CTTCTTAACT	TCTGATGTGT	CTTTTCCTCC	300
CAGTATTTAA CCACTGGATA TTTCATATGA TTGATCTCTT CTGATTTGA AAATAAAAAT 480 GTAATCTCAT TATATTCATT TGATTAGTGG GGACAGTCAA CACTTCTTTG TGTATTTTCT 540 TAGCTGTTCG TTTTTCTCGT CTGTAAATTA TCTGTTTAGG TCCTTCAGAT TTTTCAAAAT 600 TGGACTGTTA TGTTTTCAGT ATTGTTATGA GTTCTTGTTT CAATTATTA TGACAGTTCA 660 TTTTCTTTTT TAAAATAGAC TTTTTTTTC TTAGAGAAAT AAGAAAAAAT AAAAATTAAA 720 ATAGACTTTG TGTTTTAGAG AGTTTCAGGT TCACAGCAAA ATTGATCAAA AAGTATGGAG 780 AGTTCCGGCC AGGCGCGGTG GCTCACACCT GTAATCCCAG CACTTTGGAA GGCCAAGGTG 840 GGCAGATCAC AAGGTCAGGA GTTTAAGACC AGCCTGGCCA ATATGATGAA ACCCCATGTC 900 TACTAACAAT ACACAAATTA GCTGGGTGTG GTGGTGCACA CCTGTAACTG TACCTACTCA 960 GGAGGCTGAG GCAGAAGAAT CTCTTGAACC TGGGAGGTGG AGGTTACAGT GAGCCACAGT 1020 CATGCCCCTG CACTCCAGCC TGGGCAACAG AGTGAGACTC CGTCCTAAAA AAAGAAAGAA 1080 AGAAAAATATA GAGCATTCCT AAATACCACC TGTCCCCAAC ACCTGCACAG CCTCCTCATT 1140 ATCCACATCC TACACCACTG TGGTACCTTT GTTGCAATTG ATGGACCAAC ATTGACTCCT 1200 CATTATCACC CAAGCTTTGG TGTTGTACAT TCTGTAGATT TGGACAAATG TATAATGACA 1260 TGTGTCTACC ATTGTAGATT CATACAGAAG AATTTGACTG CCCTGGCCCC 1320	CTAGTGTACG	CATACCAATT	CTCTCCACAG	CTTCCATCAC	CATGCATTTG	TTCTTTTCCC	360
GTAATCTCAT TATATTCATT TGATTAGTGG GGACAGTCAA CACTTCTTG TGTATTTCT 540 TAGCTGTTCG TTTTTCTCGT CTGTAAATTA TCTGTTTAGG TCCTTCAGAT TTTTCAAAAT 600 TGGACTGTTA TGTTTTCAGT ATTGTTATGA GTTCTTGTT CAATTATTA TGACAGTTCA 660 TTTTCTTTTT TAAAATAGAC TTTTTTTTC TTAGAGAAAT AAGAAAAAAT AAAAATTAAA 720 ATAGACTTTG TGTTTTAGAG AGTTTCAGGT TCACAGCAAA ATTGATCAAA AAGTATGGAG 780 AGTTCCGGCC AGGCGCGGTG GCTCACACCT GTAATCCCAG CACTTTGGAA GGCCAAGGTG 840 GGCAGATCAC AAGGTCAGGA GTTTAAGACC AGCCTGGCCA ATATGATGAA ACCCCATGTC 900 TACTAACAAT ACACAAATTA GCTGGGTGTG GTGGTGCACA CCTGTAACTG TACCTACTCA 960 GGAGGCTGAG GCAGAAGAAT CTCTTGAACC TGGGAGGTGG AGGTTACAGT GAGCCACAGT 1020 CATGCCCCTG CACTCCAGCC TGGGCAACAG AGTGAGACTC CGTCCTAAAA AAAGAAAGAA 1080 AGAAAATATA GAGCATTCCT AAATACCACC TGTCCCCAAC ACCTGCACAG CCTCCTCATT 1140 ATCCACATCC TACACCACTG TGGTACCTTT GTTGCAATTG ATGGACCAAC ATTGACTCCT 1200 CATTATCACC CAAGCTTTGG TGTTGTACAT TCTGTAGATT TGGACAAATG TATAATGACA 1260 TGTGTCTACC ATTGTAGTAT CATACAGAAG AATTGACTG CCCTGACAGT CCTCTGCTCC 1320	TTGTTCTTGT	ATTACCTTTC	TGGAAAGGAA	TTTTTATTGT	AGGCTAATTG	TTACTCCCAC	420
TAGCTGTTCG TTTTTCTCGT CTGTAAATTA TCTGTTTAGG TCCTTCAGAT TTTTCAAAAT 600 TGGACTGTTA TGTTTTCAGT ATTGTTATGA GTTCTTGTTT CAATTATTA TGACAGTTCA 660 TTTTCTTTTT TAAAATAGAC TTTTTTTTC TTAGAGAAAT AAGAAAAAAT AAAAATTAAA 720 ATAGACTTTG TGTTTTAGAG AGTTTCAGGT TCACAGCAAA ATTGATCAAA AAGTATGGAG 780 AGTTCCGGCC AGGCGCGGTG GCTCACACCT GTAATCCCAG CACTTTGGAA GGCCAAGGTG 840 GGCAGATCAC AAGGTCAGGA GTTTAAGACC AGCCTGGCCA ATATGATGAA ACCCCATGTC 900 TACTAACAAT ACACAAATTA GCTGGGTGTG GTGGTGCACA CCTGTAACTG TACCTACTCA 960 GGAGGCTGAG GCAGAGAAT CTCTTGAACC TGGGAGGTG AGGTTACAGT GAGCCACAGT 1020 CATGCCCCTG CACTCCAGCC TGGGCAACAG AGTGAGACTC CGTCCTAAAA AAAGAAAGAA 1080 AGAAAAATATA GAGCATTCCT AAATACCACC TGTCCCCAAC ACCTGCACAG CCTCCTCATT 1140 ATCCACATCC TACACCACTG TGGTACCTTT GTTGCAATTG ATGGACCAAC ATTGACTCCT 1200 CATTATCACC CAAGCTTTGG TGTTGTACAT TCTGTAGATT TGGACAAATG TATAATGACA 1260 TGTGTCTACC ATTGTAGTAT CATACAGAAG AATTTGACTG CCCTGACAGT CCTCCTCCC 1320	CAGTATTTAA	CCACTGGATA	TTTCATATGA	TTGATCTCTT	CTGATTTGGA	АААТААААТ	480
TGGACTGTTA TGTTTCAGT ATTGTTATGA GTTCTTGTTT CAATTATTA TGACAGTTCA 660 TTTTCTTTTT TAAAATAGAC TTTTTTTTC TTAGAGAAAT AAGAAAAAT AAAAATTAAA 720 ATAGACTTTG TGTTTTAGAG AGTTTCAGGT TCACAGCAAA ATTGATCAAA AAGTATGAG 780 AGTTCCGGCC AGGCGCGGTG GCTCACACCT GTAATCCCAG CACTTTGGAA GGCCAAGGTG 840 GGCAGATCAC AAGGTCAGGA GTTTAAGACC AGCCTGGCCA ATATGATGAA ACCCCATGTC 900 TACTAACAAT ACACAAATTA GCTGGGTGTG GTGGTGCACA CCTGTAACTG TACCTACTCA 960 GGAGGCTGAG GCAGAAGAAT CTCTTGAACC TGGGAGGTGG AGGTTACAGT GAGCCACAGT 1020 CATGCCCCTG CACTCCAGCC TGGGCAACAG AGTGAGACTC CGTCCTAAAA AAAGAAAGAA 1080 AGAAAAATATA GAGCATTCCT AAATACCACC TGTCCCCAAC ACCTGCACAG CCTCCTCATT 1140 ATCCACATCC TACACCACTG TGGTACCTTT GTTGCAATTG ATGGACCAAC ATTGACTCCT 1200 CATTATCACC CAAGCTTTGG TGTTGTACAT TCTGTAGATT TGGACCAAATC TATAATGACA 1260 TGTGTCTTACC ATTGTAGTAT CATACAGAAG AATTTGACTG CCCTGACAGT CCTCTGCTCC 1320	GTAATCTCAT	TATATTCATT	TGATTAGTGG	GGACAGTCAA	CACTTCTTTG	TGTATTTTCT	540
TTTTCTTTT TAAAATAGAC TTTTTTTC TTAGAGAAAT AAGAAAAAAT AAAAATTAAA 720 ATAGACTTTG TGTTTTAGAG AGTTTCAGGT TCACAGCAAA ATTGATCAAA AAGTATGGAG 780 AGTTCCGGCC AGGCGCGGTG GCTCACACCT GTAATCCCAG CACTTTGGAA GGCCAAGGTG 840 GGCAGATCAC AAGGTCAGGA GTTTAAGACC AGCCTGGCCA ATATGATGAA ACCCCATGTC 900 TACTAACAAT ACACAAATTA GCTGGGTGTG GTGGTGCACA CCTGTAACTG TACCTACTCA 960 GGAGGCTGAG GCAGAAGAAT CTCTTGAACC TGGGAGGTG AGGTTACAGT GAGCCACAGT 1020 CATGCCCCTG CACTCCAGCC TGGGCAACAG AGTGAGACTC CGTCCTAAAA AAAGAAAGAA 1080 AGAAAATATA GAGCATTCCT AAATACCACC TGTCCCCAAC ACCTGCACAG CCTCCTCATT 1140 ATCCACATCC TACACCACTG TGGTACCTTT GTTGCAATTG ATGGACCAAC ATTGACTCCT 1200 CATTATCACC CAAGCTTTGG TGTTGTACAT TCTGTAGATT TGGACAAATG TATAATGACA 1260 TGTGTCTACC ATTGTAGTAT CATACAGAAG AATTTGACTG CCCTGACAGT CCTCTGCTCC 1320	TAGCTGTTCG	TTTTTCTCGT	CTGTAAATTA	TCTGTTTAGG	TCCTTCAGAT	TTTTCAAAAT	600
ATAGACTTTG TGTTTTAGAG AGTTTCAGGT TCACAGCAAA ATTGATCAAA AAGTATGGAG 780 AGTTCCGGCC AGGCGCGGTG GCTCACACCT GTAATCCCAG CACTTTGGAA GGCCAAGGTG 840 GGCAGATCAC AAGGTCAGGA GTTTAAGACC AGCCTGGCCA ATATGATGAA ACCCCATGTC 900 TACTAACAAT ACACAAATTA GCTGGGTGTG GTGGTGCACA CCTGTAACTG TACCTACTCA 960 GGAGGCTGAG GCAGAAGAAT CTCTTGAACC TGGGAGGTGG AGGTTACAGT GAGCCACAGT 1020 CATGCCCCTG CACTCCAGCC TGGGCAACAG AGTGAGACTC CGTCCTAAAA AAAGAAAGAA 1080 AGAAAATATA GAGCATTCCT AAATACCACC TGTCCCCAAC ACCTGCACAG CCTCCTCATT 1140 ATCCACATCC TACACCACTG TGGTACCTTT GTTGCAATTG ATGGACCAAC ATTGACTCCT 1200 CATTATCACC CAAGCTTTGG TGTTGTACAT TCTGTAGATT TGGACAAATG TATAATGACA 1260 TGTGTCTACC ATTGTAGTAT CATACAGAAG AATTTGACTG CCCTGACAGT CCTCTGCTCC 1320	TGGACTGTTA	TGTTTTCAGT	ATTGTTATGA	GTTCTTGTTT	CAATTATTTA	TGACAGTTCA	660
AGTTCCGGCC AGGCGGGTG GCTCACACCT GTAATCCCAG CACTTTGGAA GGCCAAGGTG 840 GGCAGATCAC AAGGTCAGGA GTTTAAGACC AGCCTGGCCA ATATGATGAA ACCCCATGTC 900 TACTAACAAT ACACAAATTA GCTGGGTGTG GTGGTGCACA CCTGTAACTG TACCTACTCA 960 GGAGGCTGAG GCAGAAGAAT CTCTTGAACC TGGGAGGTGG AGGTTACAGT GAGCCACAGT 1020 CATGCCCCTG CACTCCAGCC TGGGCAACAG AGTGAGACTC CGTCCTAAAA AAAGAAAGAA 1080 AGAAAATATA GAGCATTCCT AAATACCACC TGTCCCCAAC ACCTGCACAG CCTCCTCATT 1140 ATCCACATCC TACACCACTG TGGTACCTTT GTTGCAATTG ATGGACCAAC ATTGACTCCT 1200 CATTATCACC CAAGCTTTGG TGTTGTACAT TCTGTAGATT TGGACAAATG TATAATGACA 1260 TGTGTCTACC ATTGTAGTAT CATACAGAAG AATTTGACTG CCCTGACAGT CCTCTGCTCC 1320	TTTTCTTTTT	TAAAATAGAC	TTTTTTTTC	TTAGAGAAAT	AAGAAAAAT	AAAATTAAA	720
GGCAGATCAC AAGGTCAGGA GTTTAAGACC AGCCTGGCCA ATATGATGAA ACCCCATGTC 900 TACTAACAAT ACACAAATTA GCTGGGTGTG GTGGTGCACA CCTGTAACTG TACCTACTCA 960 GGAGGCTGAG GCAGAAGAAT CTCTTGAACC TGGGAGGTGG AGGTTACAGT GAGCCACAGT 1020 CATGCCCCTG CACTCCAGCC TGGGCAACAG AGTGAGACTC CGTCCTAAAA AAAGAAAGAA AGAAAATATA GAGCATTCCT AAATACCACC TGTCCCCAAC ACCTGCACAG CCTCCTCATT 1140 ATCCACATCC TACACCACTG TGGTACCTTT GTTGCAATTG ATGGACCAAC ATTGACTCCT 1200 CATTATCACC CAAGCTTTGG TGTTGTACAT TCTGTAGATT TGGACAAATG TATAATGACA 1260 TGTGTCTACC ATTGTAGTAT CATACAGAAG AATTTGACTG CCCTGACAGT CCTCTGCTCC 1320	ATAGACTTTG	TGTTTTAGAG	AGTTTCAGGT	TCACAGCAAA	ATTGATCAAA	AAGTATGGAG	780
TACTAACAAT ACACAAATTA GCTGGGTGTG GTGGTGCACA CCTGTAACTG TACCTACTCA 960 GGAGGCTGAG GCAGAAGAAT CTCTTGAACC TGGGAGGTGG AGGTTACAGT GAGCCACAGT 1020 CATGCCCCTG CACTCCAGCC TGGGCAACAG AGTGAGACTC CGTCCTAAAA AAAGAAAGAA 1080 AGAAAATATA GAGCATTCCT AAATACCACC TGTCCCCAAC ACCTGCACAG CCTCCTCATT 1140 ATCCACATCC TACACCACTG TGGTACCTTT GTTGCAATTG ATGGACCAAC ATTGACTCCT 1200 CATTATCACC CAAGCTTTGG TGTTGTACAT TCTGTAGATT TGGACAAATG TATAATGACA 1260 TGTGTCTACC ATTGTAGTAT CATACAGAAG AATTTGACTG CCCTGACAGT CCTCTGCTCC 1320	AGTTCCGGCC	AGGCGCGGTG	GCTCACACCT	GTAATCCCAG	CACTTTGGAA	GGCCAAGGTG	840
GGAGGCTGAG GCAGAAGAAT CTCTTGAACC TGGGAGGTGG AGGTTACAGT GAGCCACAGT 1020 CATGCCCCTG CACTCCAGCC TGGGCAACAG AGTGAGACTC CGTCCTAAAA AAAGAAAGAA 1080 AGAAAATATA GAGCATTCCT AAATACCACC TGTCCCCAAC ACCTGCACAG CCTCCTCATT 1140 ATCCACATCC TACACCACTG TGGTACCTTT GTTGCAATTG ATGGACCAAC ATTGACTCCT 1200 CATTATCACC CAAGCTTTGG TGTTGTACAT TCTGTAGATT TGGACAAATG TATAATGACA 1260 TGTGTCTACC ATTGTAGTAT CATACAGAAG AATTTGACTG CCCTGACAGT CCTCTGCTCC 1320	GGCAGATCAC	AAGGTCAGGA	GTTTAAGACC	AGCCTGGCCA	ATATGATGAA	ACCCCATGTC	900
CATGCCCCTG CACTCCAGCC TGGGCAACAG AGTGAGACTC CGTCCTAAAA AAAGAAAGAA 1080 AGAAAATATA GAGCATTCCT AAATACCACC TGTCCCCAAC ACCTGCACAG CCTCCTCATT 1140 ATCCACATCC TACACCACTG TGGTACCTTT GTTGCAATTG ATGGACCAAC ATTGACTCCT 1200 CATTATCACC CAAGCTTTGG TGTTGTACAT TCTGTAGATT TGGACAAATG TATAATGACA 1260 TGTGTCTACC ATTGTAGTAT CATACAGAAG AATTTGACTG CCCTGACAGT CCTCTGCTCC 1320	TACTAACAAT	ACACAAATTA	GCTGGGTGTG	GTGGTGCACA	CCTGTAACTG	TACCTACTCA	960
AGAAAATATA GAGCATTCCT AAATACCACC TGTCCCCAAC ACCTGCACAG CCTCCTCATT 1140 ATCCACATCC TACACCACTG TGGTACCTTT GTTGCAATTG ATGGACCAAC ATTGACTCCT 1200 CATTATCACC CAAGCTTTGG TGTTGTACAT TCTGTAGATT TGGACAAATG TATAATGACA 1260 TGTGTCTACC ATTGTAGTAT CATACAGAAG AATTTGACTG CCCTGACAGT CCTCTGCTCC 1320	GGAGGCTGAG	GCAGAAGAAT	CTCTTGAACC	TGGGAGGTGG	AGGTTACAGT	GAGCCACAGT	1020
ATCCACATCC TACACCACTG TGGTACCTTT GTTGCAATTG ATGGACCAAC ATTGACTCCT 1200 CATTATCACC CAAGCTTTGG TGTTGTACAT TCTGTAGATT TGGACAAATG TATAATGACA 1260 TGTGTCTACC ATTGTAGTAT CATACAGAAG AATTTGACTG CCCTGACAGT CCTCTGCTCC 1320	CATGCCCCTG	CACTCCAGCC	TGGGCAACAG	AGTGAGACTC	CGTCCTAAAA	AAAGAAAGAA	1080
CATTATCACC CAAGCTTTGG TGTTGTACAT TCTGTAGATT TGGACAAATG TATAATGACA 1260 TGTGTCTACC ATTGTAGTAT CATACAGAAG AATTTGACTG CCCTGACAGT CCTCTGCTCC 1320	AGAAAATATA	GAGCATTCCT	AAATACCACC	TGTCCCCAAC	ACCTGCACAG	CCTCCTCATT	1140
TGTGTCTACC ATTGTAGTAT CATACAGAAG AATTTGACTG CCCTGACAGT CCTCTGCTCC 1320	ATCCACATCC	TACACCACTG	TGGTACCTTT	GTTGCAATTG	ATGGACCAAC	ATTGACTCCT	1200
ACCOMPANIES OF THE CONTROL OF THE CO	CATTATCACC	CAAGCTTTGG	TGTTGTACAT	TCTGTAGATT	TGGACAAATG	TATAATGACA	1260
ACCTGCTTAC TCCTCTCC CTTTTCCTAA CTGCACAACC ACTGATTTT TTTTTTTTTT	TGTGTCTACC	ATTGTAGTAT	CATACAGAAG	AATTTGACTG	CCCTGACAGT	CCTCTGCTCC	1320
CONTROL TO COURT (D. J. O.)	ACCTGCTTAC	TCCTCTCTCC				TTTTTTTTT	1380

TTTGAGAGGG	GGTCTCACTC	TGTCCCCCAG	GCCGGAGTGC	AGTGGGGCCA	TTTGGGGTCA	1440
CTGAAAGCTC	CACCTCCGGG	GTTAATGCAA	TTCTCCGGCC	TCAGCCTCCC	GGGTAACTGG	1500
GATTAAAGGG	GCCCGCCACC	AAATCGGGGT	AATTTTTGGA	ATTTGAAGTA	AAAAGGGGGT	1560
TTCCCCATTT	TAGCCAGGAT	GGTCTCGATC	TCCTGACCTC	GTGATCCGCC	CACCTCGGCC	1620
TCCCAAAGCT	GGGATTACAG	GCATGAGCCA	CCACGCCCTA	CCTTTTTTT	AAAAAACAAG	1680
GTCTTGCTCT	GTCACCCAGG	CCTGAGTGCA	GTGATGATCA	CTCCTCACTG	AAGCGTCGAC	1740
CTCCCAGGCT	CAAGTGATCC	TCCCACCTCA	GCCTCCTAAA	TAGCTGAGAC	TACACACACA	1800
CACCACCATG	CCCAGCTAAG	TTTTGTATTT	TTTATAGAAA	TGTGGTCTTG	CTGTGTTGTC	1860
CAGGCTGGTC	TTGAACTCCT	GAGTTCAAGC	AATTTGCCTG	CCTTGGCCTC	TCAAGGTGTT	1920
GGGATTACAG	GCATGAGTCA	CCGCACCTGG	CCTTTTTTAT	TTTCTTTTTT	TTTTTTTAAC	1980
CAGTGATCTT	TTACTGTCTC	CATGGTTTTT	CACATTGGCT	TCTGTCACTT	AGTAATATAT	2040
GTTTAAGTTT	CTTCTACGTA	TTTTCATGTT	TTTAGCTTAT	TTCTTTTTAG	CAGTGAGTAA	2100
TATTTCATTG	TCTGGATGTG	CCATCACTTA	TTTATCCATT	CGCCTGCTGA	AGGATATCTT	2160
GATTGCTCCC	AGTCGTGGCA	ATTATAAATA	AAGTTGCTGT	AAACATCCAT	GTGCAGGTTT	2220
TTTTTAAGTG	GCATAAGTTT	TCATCTCATT	TGGTTAAATA	CCAAGGAGCA	CAATTGCTGG	2280
ATCATATGGT	AAGAGCTTAT	TTATTTTTT	GAGAGACTAC	CAAGCTGCCT	TCCAAAGTGG	2340
ATGTACCATT	TTGCATTCCC	ACCAGCAGTG	AATGAGAGTT	CCTGCTGCTC	САТАТТСТТА	2400
CAAACATGTA	GTATTGTCAA	ATGTTTTGGA	TTTTAAAACC	AAAATCCATT	TTCATAGATG	2460
TGTAGTGGTA	TCCCGTTTTA	ATTTGCAATT	ACCTAATGAC	TTGATGTTCT	GTGTCTTTTC	2520
AGATGCTTAT	TTGCCGTACT	GTTTATCTTC	TTTGGTGAGG	TGTCTATTCA	GGTCTTTTGC	2580
ССАТТТТТАА	TCTGGTTGTT	ATTTTTCTTG	TTGAGTTTAA	GAATTCTCTG	TCCTTTGTCA	2640
GATCTATCTT	TTGCAAATAT	TTTCTCCTAG	TCTGTGGCTT	ATCCTCTGAT	TCTCTTGGCA	2700
TTGTCTTTCA	CAGAGTAGAC				AATTATGTTC	2760
		SUBS	TITUTE SHEET	(Rule 26)		

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TCATGGATCA TGCCTTTGAT GTTATATCTA AAAAGTTCTC GCCATACCCA AAGTCATCTA 2820 GATTTTCTCC TGTTATCTTC TTGGCATTTT ATAGTCTTAT GATTGATATT TAGGTCTATG 2880 ATTCATTTT AGTTAAATTT TTGTGAAAGA TAATAAGGTC TGATATGGAT TAATTTTTCT 2940 ATATGTAGCT GTCCCGTTCC AGTATCATTT GTTGAAAAGA CTATCTTGCT CCATTTTATT 3000 GCCTTTGCTC CTTTGTCAGT TGACTATATT TATGTGGGTC TGTTTATGAT CTCTGTTCCG 3060 TTCCATTGAT CTGTTTGCCT TTTCTTTTGC TAATACCACA GTCTTAATTA CCATAGCTTT 3120 AAAGTAAGTC TTGAAGTCCA ATAGCATTAA TCTTTGACTC TTCTTTAATA TTGAGTTGCC 3180 CCTTCAGAAT CTTAATGTCT CTCCATGTAA ACTTTAGAAT CAGCATTTTT ATATTCACAA 3240 AATAACTTGC TGAGATTATG ATTGAGATTG CATTGAATCT ATAGGCTTAT TTGGGAATAA 3300 CTGACATCTT GACAATATTG AGTCTTCCTG TCCATAAACA TTATTTATGA TGGGCTTCTT 3360 CTTTATGTTT AGGAGCTTTT GTTTTTCTG TCAGATATTC CACTTCTACC TTTATGATTT 3420 CTTAATTGCC TTTTATGCTT AGAAAGTTTT TCCTCATCCT GAGCTCACAT ATTCATTTAT 3480 TTTCTTTTAA AATGTGTTTT CAAGCATTTA ATTTTTAAAC CTATGTGGAA TTTATTTTGG 3540 TATATGGAAT GAGGTGGTGG TCTAACTCCC TCCTCAAA TATGTAGTTA TTTTTCCCAA 3600 AACCATTTTC TATTAATTTA TCAAGAATAG ACATGTATAC ATATACATAT ATAATAGTCA 3660 GCCTTCCACT TGTTGTTTGA CCCTTGTGAA GGAAATTGTA TGAGTTTCCA ATTTTGGATT 3720 AGGCTCAGGT AGTAATTGAG CTGGGTTCTG CCAGAGATCC ATGTTAATTC ACTATCCAAA 3780 CAGAGTTATA AAATGTAAGT TTTATGAAAA TCTAACAGTA TATCACTGGT TTAATGATCA 3840 CAGCCTAGGA AGAATGGGGA AATTGTCAAA ATCTTCTGTG GATGCACCTG AAGGCCACTG 3900 CTGAACCCAT TTCCCTGCTA GGCACGCTG CTGGTACCAG GGGCAAACTC CTGGAGTATA 3960 TATGAACCAC CTACATCTCC TTCTCTTCCC CCCCTACCCT TGAGATTTTC ATGTGTCCCT 4020 TAAGGATGTG TGTCCTACTT CCCTTGGAGA GTCACTACCA CATTGAACAC TTTAGACTGT 4080 GAGTCCTGTG AAGATGGGGC TCATGAGTGT ATTGCTCCCC AGTTGTTTCT CTAGCACTAG 4140

CTCAGTATAG	GGCATAAAAA	TCTGAATGGA	TGAACAAACC	ACTATTACTG	GTGGGGACAT	4200
GCTACTATCT	TACATGGTTC	GAGGTGGAAT	AAAGGTTGAG	AACAGCTATA	TAATGTGTTC	4260
CTTGAAGGGC	AGCAGTACAT	CAGTGCAATC	AGCCTACCTT	CTCCATACTT	CTCACTCTGA	4320
AAACTGTAAA	GCTGCACCTA	GCAATCAACT	TGGGAGCTTT	AAAAGGGACT	GCTCCCTAGC	4380
TCTCACCCAC	AAAGCTGTAG	TCTAGCACAG	GTGACTTTTT	TAAAAAAGTT	TTTTGGTCCA	4440
GATGTGATGA	CTCACGCCTG	TAATCCCAGC	ACTTCGGGAG	GCTGAGGCTG	GGAGGTCACC	4500
TGGGGTCAGG	AGTTTGAGAC	CAGCGTGACC	AACATGGAGA	AACCCCATCT	СТАСТАААА	4560
TTTGCCGGGC	ATGGTGGCAC	ATGCCTCTAA	TCTCAGCTAC	TCGGGAGGCT	GAGGCAGGAG	4620
AATTGCTTGA	ACCCGGGAGG	CGGAGGTTGC	CGTGAGCCAA	GATCACACCA	TTGCACTCCA	4680
GCCCGGGCGA	CAGTGCAAGA	CTCCGTCTCA	АААААААТА	AAAAAGGAGT	CCTATTAAGA	4740
СТТАТТТТТА	CAGGTTGGAT	ATCTCTAATC	CCAAAATCTG	AAATGCTCCA	AAATTTGAAA	4800
CTTTTTGAGC	GCAGACATGA	TGCTCAAAAA	AATGCTCACT	GGGACATTTT	GGATTTCAAA	4860
ATTTGGATTA	GGGACTAGGT	GTGGGAGCTC	ACACCTGTAA	TCATAGCACT	TTGGGAAGTT	4920
GAAGCAAGAG	GATCAGTTGA	ACCCAAGAGT	TTGAGAGCAG	CCTAGACAAC	ATAGTGAGAC	4980
GCCGTCTCTA	CAGAAAATTT	TAAAAATTAG	CCAGGCATCG	TAGTACATGC	CTATAGTCCC	5040
AGCTACTCAG	GAGGCTGAGA	CAGAAGGATC	ACTTGAGTCC	AGGAGGTAGA	GGCTGCACTG	5100
AGCTATGATC	ATAACCACTG	TCTCCATCCT	GGGCAACAGA	GCAAGACCCT	ATCTCTTAAA	5160
AAAAATCTGA	AACACTGCTA	GTCCTCAAGA	TAAGGGATAG	TCAGTCTTTA	TAAAGACTCA	5220
ATTAGTTATT	GGATATCTGA	GGAAGCATGC	ATATCAGGCT	CCCAAAAGAT	CATTGGTTTA	5280
GGCACACATT	TTAATAGCTT	GGAAATCCAG	AATACTCTTC	TGGTGACCAG	CTCAGACATA	5340
GTCCTGATAA	TATAGGACCT	CATCTAACAT	GACTCCCTAT	TTTCCAGATA	AGCATGGATT	5400
CCTGGTTCAT	TCTTGTTCTG	CTCGGCAGTG	GTCTGATATG	TGTCAGTGCC	AACAATGCTA	5460
CCACAGGTAA	ATTGTCATTT	GATAAGGCTG	CTATTTGAAA	TGAAATTTTG	CTTTCACATT	5520
		CITECT	TITUTE SHEET	(Rule 26)		

TAATGAGCCA	CATTTGAAAA	CCGAGATGGT	ATTTGAAGAA	AGGAATATAA	AAATTTTATT	5580
CAAAGTGATG	GTAAAATAGG	TGTCTTCAGA	AATCTTGGAA	TTGAATGCTC	AGCATTGTTT	5640
TTCATACATA	CATAACTGCT	ТТАААТАААТ	CAAAGAGATT	ATGTGTTCTT	TCCTGAAAAG	5700
ТААААТАААТ	TGTTGACATT	ТАСААСТСТА	TATATGGTTT	CTGAGGAACT	AAGTGAAGAA	5760
TCTTGTGTCT	TTCTCCCTTA	AACCGTAGTC	CTTTGGAGGA	GGTAGGAAAG	GTCCAGCATG	5820
AGATAAAAAC	GTAGGGGGTG	GGTGGTGTTG	AGGGGGATTG	GTCTTTGCTT	GGTCTCCATA	5880
TGTTTGAGAG	TTTATTAAGG	CTTGCTGCTT	TGTGTCTCAC	AGCTTTTTAG	CCTCACATTC	5940
TTCATGTGCT	ATTTCCTTGT	TTTTTGGTGT	TTGTAGTTGC	ACCTTCTGTA	GGAATTACAA	6000
GATTAATTAA	CTCATCAACG	GCAGAACCAG	TTAAAGAAGA	GGCCAAAACT	TCAAATCCAA	6060
CTTCTTCACT	AACTTCTCTT	TCTGTGGCAC	CAACATTCAG	СССАААТАТА	ACTCTGGGAC	6120
CCACCTATTT	AACCACTGTC	AATTCTTCAG	ACTCTGACAA	TGGGACCACA	AGAACAGCAA	6180
GCACCAATTC	TATAGGCATT	ACAATTTCAC	CAAATGGAAC	GTGGCTTCCA	GATAACCAGT	6240
TCACGGATGC	CAGAACAGAA	CCCTGGGAGG	GGAATTCCAG	CACCGCAGCA	ACCACTCCAG	6300
AAACTTTCCC	TCCTTCAGGT	ACTAGAGATG	ATTCTGTTTG	TTCTTTTGCT	CTTTGAGTTT	6360
AGTCTTCCTT	TTATTATCTT	GTTTGTGTTT	TCTAGCCTTA	AAATTTCTTC	AAATAAGTAA	6420
AATTGCTCAA	GTGAAGTAAT	GAAACCTGTA	TGTGGAATTT	TTGGGTTAGC	ATGAGTGAAG	6480
AGGAAAGAAG	AAAGATTCTG	GAGAATATCT	TTCTGCTAGG	TGGGATCCTG	GTTAGATTGA	6540
GAGGACTTAA	ATGTGTTTAA	AGGTAGAGAA	GAAGGCTTAA	AAAGACAAGA	GAAATAGAGG	6600
AGCTCATTGA	CGATGCAAGA	GACTGAAGAT	GAAAAGATAC	AGAGAATGAG	TAATAAGATT	6660
AGGTTTGGAA	AGGGAGGGAT	CCGTGGAGAC	CATGGAAAGG	AGAATGGGTA	TTGATGTCCA	6720
TGACAGTTAG	ATGTGAGATA	CAGAGAATGA	GTAATAAGAT	TAGGTTTGGA	AAGGGAGGGA	6780
TCCATGGAGA	CCATGGAAAG	GAGAATGGAC	ATTGATGTCC	ATGACAGTTA	GATATGGAGT	6840
GGCAGGCCAG	TGGCCAGGGG	TGGCATCAGG	CTCTGGGAAA	TGGTTACATT	GCAGTGCCAG	6900
SUBSTITUTE SHEET (Rule 26)						

TTGTTCAGGG	CCTCAGGTTG	AAGCAGTAGT	CCCAAGGAGA	AAATCAGAGA	CGTGGATCTG	6960
AGACCAGGGC	AGGTAAGACA	AGTTTCTGAC	CTCTTTGAAC	CTTAGGTACC	TTGTCTGTAA	7020
AAGAGGATTA	GAGATACCCT	CAAAGGGCTT	CTATGAGGAG	TAAAGGAAAT	AATCATTACC	7080
TGATTGCTAT	GTAACTGTCA	TCCCTTTTCT	AGCAAAAATC	ACTCTTTCCT	CTTCTGTGTT	7140
CCCAGTTAGA	TGGTGAGTGC	CCCTAAGCAG	AATCACATCT	CGCTCATGTG	GAACATTCAG	7200
GAACTGTTTG	CTCAGTTGAT	TCTCATTTGT	TACTACAGAT	GATATCTTTT	ACTGCGCCTT	7260
ATAACTCAGA	CCCTTCACCT	GCCAGCTTTT	CCCCATATTT	TCTACCGTAA	AGACAAGACA	7320
GCATTTGCAG	TTAAGAGCAC	AGTCTTCAGT	GCCACACTGA	GTTTGAATCC	CAGCTCTTCC	7380
ATAAACCAGC	CATGTTTATG	GCATAGCTGG	CTTACTTTAT	CTCTCTACCT	CGGTTTGTTC	7440
ATCTGTGAAA	CAAGAATGAG	TGATAGTAAT	AGTTCTTACC	TCATAGAGGA	GATATTAGGA	7500
TTAAACAAGT	TAATATGGGT	AAAGCACTTA	TAAAGGTGCC	TACACATGGT	AAGCACTATT	7560
TTTAAGTGTG	AGCTGTTAGT	ATTGTTGTGG	TTATTGCTCT	GATAGTTACC	AGTAAAATAT	7620
ATGAAGGTAC	CTTTAATGCA	GATGGCATCC	CACTATTCTT	GATGAGATAG	GGGACTGCAG	7680
ACAAATAATG	TCTGATACTT	GCTTTGTGCT	TTAGAGTTAA	TGTAGTTTTG	TCATAGTTAT	7740
TACTGTGTGC	TAGGCATCGT	ACTAAGAGTT	TTCTAGAATA	ATCCTATGAA	TTAAGTTCTA	7800
TTTTATGTTT	TATAGGTGAA	AGTATTTTAC	AATGATGAAA	CCATAATTTG	TGGAATGTTT	7860
TTCAGTGTAC	AGGTCATGAC	ACAATTCATG	AAATCACTTT	AGCAGGCCAC	CACTAGTTGT	7920
TTGTTTTGTT	TTATTTTAAT	GGATGATCCA	GTTCCATGTT	TATTCTTTTA	ATGTTACATA	7980
CAATTTTTTG	AAATTTTAGT	AACAACATAA	AATGTTGGGT	TGTGGCCATT	GCTTAGGGAG	8040
AAAGGCAGGA	TAACTTGTAC	AAACTGTATG	AGTGAATGGA	AAAGGTGGAG	ACTGTAACAC	8100
AGGCCTGACT	GACTGAACAG	CCCATGTTCT	ATTGTGTACT	GTCTTTCATT	TAACAGTTCT	8160
GTGACATGAC	CATGGATAAT	CATCTCCTTT	TAACAGATGC	TTGATTTCAG	ACTGTATATA	8220
GAGGTTAAAT	GATTTGTTTT	AGATCTCAAG	GCTGACAAAT	TAGGCCTATT	TCTCACTTTT	8280
		OI ID CO	niam mar crimita	(Dula 26)		

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GCGGTCTTTC CACTC	TGCTT GTAGGGAAC	T TAGTTTTCCA	TAAACTGACT	TAGGTCCAAA	8340
TTGTGCCACA GCTAA	GAATC TAGTTATTG	T ACATTTAACA	CAGTTCACGT	CATAGGAGGC	8400
TGAGACTATG TTTCT	CTAGT GGCGTTTAT	T CAAGATGAGT	AAAACACAAG	AAACCATTAT	8460
CGCACATGGG AATTT	CATAG TCTTAAACC	C CACATCCCAC	TTATCACCAC	CATTTACCAG	8520
TCCTCCTGTA ACAGT	TACAA TTTTTTATT.	A AATCAGTATT	TGATGTATAT	TATTGTAATT	8580
ATGAAATATT CATTG	CTGAG CTATAAGTA	T AAATGGATTG	TTTTTCTTGT	ACAGTTTTTT	8640
TTCTGGATTT AATAC	TTACC TTATTTTTT	G TTTATTTAGT	TTTCTATTTA	GTCAGGCCAG	8700
GCACACTGGC TAACA	CCTGT AATCCCAGC	A CTTTGGGAGG	CCAAGGTGGA	CAGATCACTT	8760
GAGCTCAAGA GTTTG	AGACC AGCCTGGGG	A ACATGGTGAA	ACCCCATCTC	TACAAAAAAT	8820
ACAAAAATTA GCTGG	GCATG GGTGCATGT	G CTTGTAGTCC	CAGCTACTCA	GGAGCCTGAG	8880
GTGGGAGGAT TGCTT	AAGCC CAGGAGGTT	G AGGCTGCAGT	GAGCTGTGTT	CATACCACTG	8940
CACTCCAGCC TGGGT	GACAA AGCGAGACC	A TGTCTCAAAA	AAGTTATTGC	TACTCAATTC	9000
TTACCATGCT CTCCA	GAGCC TCTCAAAAC	A GCTTTCTACA	AAGTGAGATC	TGTTAGATAA	9060
TCTATTTCTT TTTTA	CCTCT AGAAATTCC	T CCTGAGCCCT	CCATTGTCTT	ATTCCAGTCT	9120
AGGCTTGTCG ATCTC	TAGGG CTACTACAC	A GATACATCAG	CCTGAGATTT	CCCTTCTCTG	9180
TCATTCTGGG AATTC	CCCTT GCTGCTGCT	T CCTGACTTCC	ATATTGTCTT	CCTTTTTGTC	9240
TTCTCATCAT TCGGT	AGATT CCTGAGAAA	A GGGGTCCATG	GGAGGCAAAT	TGCATCCTTA	9300
САТАТСТААА ААТАТ	CTTTA GGGCTGTGC	A TAGAATTTGA	GGAATATTTT	TCCCCCAGAA	9360
TTTTTAAAGT AATGC	CCTAA CTGACACCT	G TTTACCAGGT	TTGGAGGATT	TTACTGCTAT	9420
CTTAATCCCT AATTG	TTTGT ATGCTTTCT	A GGATCTTCTC	TTTATCATCA	GTATCCTGAA	9480
ATTTCACAGA GATGT	ATCTT GATGTGGGT	C TTTTTCGTTC	ATTATTATGG	АТАСТТААТА	9540
GGCCCTTTAG AGCCT	TGATC TTGCATTTC	T GAAAATTTTC	TCCCATTTCT	TTGAAACCTT	9600
CTCCCCCTCT TCCTT	ттттт тттттстса	A ATTCTTAATA	TTTGGATATT	GGATGTATCC	9660

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TGAATTAATT	CTTTAATCTT	TAAAATTTTT	CCTTTCTGTT	GATCTTTGCT	TTGAGTCTTT	9720
TTCTCCTTTT	AAAAATAAAC	AAAGGCCAGC	TAGGCACAGT	GGCTTATATC	TGTAATTCCA	9780
GCACTTTGGG	AGGCTGAAGC	AGGAGGATCG	CTTAAGCCCG	GGAGTTTGAG	ACCAGCCTAA	9840
GCATCGCAGC	AAAACCTCAT	СТСТАСАААТ	GATTTAGAAA	TTAGCAGGGC	CTAATGGCTC	9900
ATGCCTGTGG	TCCCAGCTAC	TCAGGGCTGA	GGCAGGAGGA	TTACTTGAGG	CCTGGCAGTT	9960
GAGGCTGCTG	CAGTGAGCTG	TGATCGCACC	ACCGTACTCC	AGTCTGGGCA	ACAGAGGGAG	10020
ACCTCATCTC	ТАААТАААА	AGGCCTGGTG	TGGTGGCTCA	CTCCTGTAAT	CCCAGCACTT	10080
TGGGAGGCCA	AGGCAGGTGG	ATCACTTGAA	GCCAGGAGCT	CAAGACCAGC	CTAGCCGACA	10140
TGGCAAAACC	CTCTGTCTAC	СТАСТААААА	TAAAAAAATT	AGTCAAACGT	GTTGGCATAT	10200
ACTTGTAATC	CCAGCTACTT	GGGAGGCTGA	GACATGAGAA	TTGCTTGAAC	CTGGGAGGTG	10260
GAGGTTGCAG	TGAGTCAAGT	CCCTGCACTA	TAGCCTGGGG	AACAGAGTGA	GACCCGAGAC	10320
TCTATCTCAA	АААААААА	TCAGTGACAA	GTAAAAAGGT	AGAATACCTT	ТТТТТТТТС	10380
TTTGAGACAG	TCTCACCCTG	TCGCCCAGTC	TGGAGTGCAA	TGGCGCAGTC	TCGGCATACT	10440
GCAAACTCTG	CCTTCAGGGT	TCAAACAATT	CTCCTGCCTC	AGCCTCCTGA	GTAGCTGGGA	10500
TTACACATGC	CCACGACCAC	ACCCAGCTTT	TTTTTGTATT	TTTAGTAGAG	ACAGGTTTCA	10560
CCATGTTGGC	CATGCTGGTC	TCGAACTCCT	GACCTCATGA	TCCACCTGCC	CCGGCCTCCC	10620
AAAGTGCTGG	TATTACAGGC	GTGAGCCACT	GCGCCCAGCC	TAGAATACCT	TTTAAAAATA	10680
AATAAATAGG	CCGGGCGCGG	CGGCTCATGC	CTGTAATCCC	AGCACTTTGG	GAGGCTGAGG	10740
CGGGCAGATC	ACGAGGTCAG	GAGATCAAGA	CCCTCCTGGC	TAACATGGTG	AACCCCATCT	10800
СТАСТАААА	ATACAAAAA	AAATTAGCTG	GGCGTGGTGG	CAGGTGCCTG	TAGTCCCAGC	10860
TACTCTGGAG	GCTGAGGCAG	GAGAATGGCG	TGAACCCAGG	AGGTGGAGCT	TGCAGTGAGC	10920
CGAGATTGCG	CCACTACACT	CCAGCCTGGG	CAACAGAGCA	AGACTCTCTC	ТСТАААТААА	10980
ТААТАААТАА	АТАААТАААТ	АААТАААТАА	CTCCTTTTAC	AAAAGCATAT	ATATTCATTT	11040
		ermen	ere ere citere	(Dula 16)		

TTTCCATTTA	TAATATAAAT	AATAGATATG	CTGAGTTGAT	TTCTGCATAT	TGCTTTTTCA	11100				
GTTACCCTAT	CATACTTGCT	CTTTGTTTTA	GTAAAGAGCT	GCTGTATTGA	AGGATATACC	11160				
ТТААТСТСТТ	TATCCAGTTT	CCCCATCAGT	GGACACTAAG	ATTGTTTTCA	GAGTACTCTT	11220				
АТАААСААТА	CAGTTTGTCA	TTTCAGACAC	ATATGAGAAT	ATTAGCAGGA	TGAATTATTT	11280				
TAAGTCTGCA	TTTATAAATT	TATGGATATT	GCCACATTTA	CCTCTGCTAG	GAAGTCTATT	11340				
CCTATTAACA	ATATGTCAAA	GTGCCTATTT	TTCTAAACTC	TCTTCAGTGT	GGTGAATTGT	11400				
TAAACTTGGG	GATCTCTGCC	AATCTGACAG	GTGAAAAATA	ACATCTCAGT	GTAAGTTTAA	11460				
TTTGCATTTT	GCTGAGATTG	AGCAATTTTG	TGTAATTTAA	AAGATCATTT	ATTTTTCTGA	11520				
GCATTCTCTG	TTGATATTCT	TTACCCATTT	TTATTAGAGT	GTCAAGGTTT	TCCTGACTCG	11580				
TTTGTAGATG	TTCTTTGTAC	GTTTGGGAAA	TGAGTCCTTT	GCCTATGGTA	AAACTGCAAA	11640				
TGTTGTTCCC	TAGGTGGTCA	TCTAGATTTT	CTGCATTGCA	GAAGATATCA	TTAGCTATTT	11700				
TTAATTTTT	ТААТТТАААТ	ATTTCTCAGT	TTAGGTTTTC	TAGGAATTGG	GTCATATCTA	11760				
GGAAGGCTTT	CCTTACTCCA	AGATTATAAA	AATAATTTTC	TTCTGGACTT	CTATGGTTTC	11820				
GTGTGTGTGT	GTGTGTGTGT	GTACACGCAC	TTAAGTCTGT	CTCGAATTTA	TTCTGATGCA	11880				
GAGTGAGCTA	TGGATCTGTT	TTTCCCCAAA	TATCTAACTT	GTCCCAATAC	CCCTTAATAA	11940				
TTTATTTTTC	CTCATTGATT	TGAAATGCCA	CCTATCTTAT	ATATTGAATT	CAGATATTTA	12000				
TTTACCTCTT	CATATGTATT	TGAGTATTTG	GGAACATTCA	TTTTATTTTC	TATTAATCTT	12060				
TTTCTCTGTC	CATGTGCAAA	GCCTCACTGT	CTCAATAATT	GTAACTTTGT	AAAGTATTTA	12120				
ATATCCAGTA	AAATGAGTCA	TTCCTTGTTA	ATTTTATTTT	TCAGAATTTT	GTTAGCAATT	12180				
СТТАТТАТАА	ACATTAGAAT	TAACTTGTCT	AGCAGGAAAA	AAAGTTTGTA	TTGATCATGT	12240				
TAAATACGTA	GATTAACAGA	GAAAATGGCA	TCTTACAGAT	GTTGAGTCTA	ACTATCCAAG	12300				
AATGCAATAT	ATTCCATTTT	CTGAAGTCTT	TTTTTTTTAA	ATCTTCTGTT	TTTGTAATTA	12360				
TAAATGGAGC	ATTTTCTTCC				ATATGAAGGC	12420				
	SUBSTITUTE SHEET (Rule 26)									

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TACTGATTTT	TGTAGAGACA	TTTTGTACTG	GCCACCTTAA	ACTCTCTTAG	TATTGGAAGT	12480
AATTTTCTTC	ATTAATTTT	ATGGCTTCAA	GTCATCTCAT	CTGCATATAT	CTTCCAAATT	12540
TTTAGAACTT	TCTTTTTCTT	CTGTTTAATC	GCATTGATGA	ATACCTCCAG	AACAAAGTTA	12600
AGCAGCTGGT	AAATGCAGAC	AGCATTCTCT	TGTATCTGAC	ACTAAGGAGG	ACACTTTCAG	12660
TGGTTTTTCA	TTATACGTGG	TACTGACTCT	TGAGTTGAGA	TAAACATATT	TTATTGTGTT	12720
CAGGATTTAA	TGAGCGTTTA	TGTTAGGAAT	GGGTGTTAAA	TTTTGCCAGT	TGCCTGTTCA	12780
GGATCAATGA	GAAAGATCTG	AATGATTTTT	TTTCTCTTTT	GGTCTGTTTC	TATGGTGGAT	12840
TCTATTCCTA	GGTTTGTTTG	TTTGTTTGTT	TATTTTGAGA	TGGAGTCTGT	TACCAGGCTG	12900
GAGTGCAGTG	GCGCCATCTC	AGCTCACTGC	AACCTCCACC	TCGCGGGTTC	AAGTGATTCC	12960
CCTGCCTCAG	CCTCCGAGTA	GCTGGGACTA	CAGGCACGCA	CCACCATGCC	CGGCTAATTT	13020
TTTGTATTTT	AGTAGAGACG	TGGTTTCACC	ATGTTGGCCA	ACCTGGTCTC	GAACTCCTGA	13080
CCCCATGATC	CTGCCTCAGC	CTCCCAAAGT	GCTGGGATTA	TAGGTGTGAG	CCACTGCGCC	13140
CTGCCAGTTT	TTATTTATTC	ATTTTTTAGA	GACAGGGTCT	TGCTCTGAAT	TAATTCTTTA	13200
ATCTTCTTAA	TTTTTCTTTT	CTGTTGACCT	TTGCTTTGCT	TTAAGTCTTT	TCCTTTGAGT	13260
CATCCAGGCT	GAAGTACAGT	GGCACGATCA	TGGCTCACTG	TAACCTTGAA	CTCCCAGACT	13320
TAAGCAAACC	CCACCTCAGA	CTTCTGAGTA	GCTAAGGACT	ATAGGCGCAT	GTCACCACGC	13380
CCAGCTAATT	TTTAAATTTT	CTCAGAAACA	GGGACTCACT	GTGTTGCCCA	GACTGGTCAT	13440
GAACTCCTGG	CCTCAAGCAG	TCCTCAGCCT	TAGCCTTCCA	AAGCACTGGG	ATTATAGGCA	13500
TGAGCCAAGG	CCGCCCAAAC	ATATTGTATC	GTTCCTGTAA	CAAGCTGTTG	CAGTCTATTT	13560
GATATTATTT	CTTATTTTTT	TCATTTAGAA	TTTTCTCTGT	CTAGATATTC	TCAAATTATC	13620
TCTAAATGAG	ATTGATCTAT	GTTTTTCCTT	TGTGTGTGTA	TTCTTTTTGA	TAAGTTTTAG	13680
TTTTTAGTGT	TTTGTTTTGC	TACATGGAAA	GGATTTGAAA	GTTTACACTA	AAAAATATGC	13740
TTTTTTTTT	TAAGACAGGC				GTGGCATGAT	13800
		SUBST	TITUTE SHEET	(Rule 26)		

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CTCGGCTCAT TGCGGCCTGC ACCTCCTGGG CTCAGGTGAT CCTCTCACCT CAGCCTCCCA 13860 AGTAGCTGGG ATTACAGGTG TGTTCCACCA TGCCCAGCTA ATTTTTTGTA TTTTTTTGTA 13920 GAGATGGGGT TTCGCCATGT TGCCCAGGCT GGTCTTGAAC TCCTGGGCTC ACATGATTCT 13980 CCTGTCTTAG CCTCCCAAAG TGCTAGGATT ACAGGTGTGA GCCACCACAT CTGGCCATTT 14040 CATTCATGTT TTCAAATGTA TTTGAATGAG GAAAAGTTCT CCCTTGTGAT TATTTATTAT 14100 14160 TGTTTAGGCT GAATAACCAT TTATTTCATA GGTTTATTGC CTTTTTTCTT CCAAAGAACT 14220 TGCTATTGTG CATTTATAGT CCTTTTATGT TTACGTTTTC TATTTCATTG ATTTTAACTT 14280 TCTACCTTCT TTAGATTTAT TTTGTTCTTT TTCTATCTTC TTGAATTGAG TGTGCTTTAA 14340 TTGCATTCTT TCCAGTTAAT TAACATATTT AGTGCTGTGA ATTTTGAACA AGCACAGCTT 14400 TAGCCACATC CCATAGGTGT TTCTATAGGC AGTTGTATTA GGATGCGCTA TAAGCTGCTC 14460 TGACAAAGAT ACCAAAATTC AGTGACTTAA ATAAGACCAA AGTGTCTTTC TCTCCCCAGT 14520 TACATTCCAG AGGTAGACAG GGCCTTCGTC TCAGTAGGGA CCAAATTCCT TTCCTCTTGT 14580 GGCCCTGCCA TCCTAACAAT ATTGCCCTTA TCTGTTTGGT TAGAGATAGT TCTCACCATT 14640 GGGTTCTAGT TCCAACCACT GCGAAGGACA AACAAAGGGA ATAGGGGCCA TTTCTCTTCC 14700 AAAAGATGTG ACCTGGAAGT TACTCACATT GCTTTAGCTC ACATCCCGTT GGCTAGAATT 14760 CATCACATGA CCACACCTAG CACAAAGGAG TCTCAAATAT AGTCTGCCAG GAGAGCTTGG 14820 TGCTCAGCTA AAAAACAAAG GTTCTGTATC AAGGCAAGAA GAGAAAGAGA CTGATCTGAG 14880 GGGAGGAGA TTGGCAGGTT CTGTCACAAA ACTTCTCGTC ATTGTTATTT TTAAGGTATT 14940 15000 CTCTGTTGCC CAGGCTGGAG TGCAGTGGCG TGATCTCTGC TCACCGCAAG CTCTGCCTCC 15060 TGGTTCACGC CATTCTCCTG CCTCAGCCTC CCAAGTAGCT GGGACTACAG GCGTACACCA 15120 CCACGCCTGG CTAATTTTT TTTTGTATTT TTATTAGAGA CAGGGTTTCA CTGTGTTACC 15180

CAGGATGGTC	TCATTCTCCT	GACTTTGTGA	TCTGCCCACT	TCGGCCTCCC	AAAGTGTTAG	15240
GATTACAGGC	GTGAGCCACC	GCGCCCGGCC	GTCTGTTTGA	TTTTTGAGAT	GGAATCTCAC	15300
TCTGCCCCCC	TTCTGGAGTA	CAGTGGTGTG	ATCTTGGGTC	ACTGCAACCT	CTACCCTCCC	15360
AGGTTTAAGC	AATTCTTGTG	CCTCAGCCTC	CCAAAGTGCT	GGGATTAAAG	ACGTGAGCCA	15420
CTGTGCCCAG	CCCATTTTGG	TTTTGATTTT	TTTTTTTCTT	TGAAATAGAG	TCTCGCTCTG	15480
TTACCTAGGC	TGGAGTACAG	TGGCATGATC	TCGGCTCACT	GCAACCTCCC	CCTCCTGGGT	15540
TCAAGTGATT	CTCGTGCCTC	AGCCTCCCAA	GTAGCTGGGA	TTATAGGCAC	CCACCACCAC	15600
GCCCAGCTAA	TTTGTTTTGT	ATTTTTAGTA	GAGACGGGGT	TTTACCATGT	TGGCCAGGCT	15660
GGTCTCGAAC	TCCTGACCTC	AGGTGATCCA	CTGCACCCGG	CCTCATTTTG	GTTTTGATTT	15720
ТТАТТТТСАА	ATGTTTTCTT	ACTTTGTCAA	TTTCTAATTT	TATTGCATTG	GGACAAAAGA	15780
ATATTGTACT	CTTTCTACTG	TTGGGGTTTA	TAAGGGCTGT	GGATATTTCA	CTCGCCTTTG	15840
AAAAGAAGGT	TTTCTCTGTT	AGTCTGTAGA	GTTTGGTATG	TACCAATTAG	ATTTTATTAC	15900
ттатсатттт	GGTCTTTTGT	ATCCTTACTT	AATTTTGTCC	TCTTGAATTT	TAATGGAGCA	15960
AAAGACATAA	AGTCCTCTAA	TAACATGCGT	TCTGTTTGCA	TTCTCATACT	TTTTATGAAT	16020
ATTGATGCTG	CACTATTTGT	GTACCCAGGG	AGAAGGCCAG	ACCACTGTCC	AAAGTTTAGT	16080
GAATCTGGGC	AGCCTTGTTT	CCCAGTTGTT	GGAGGATGCC	TCATGGAGGA	AAGCATTCCT	16140
AATCCTGGAG	CTTGTTTTGT	TGTACTCTAA	TTGAATTGTA	ATGTGTTTCT	TTAACCTGAA	16200
TGAATGTTTC	TATTTTTTAC	TTATTACACA	GGTAATTCTG	ACTCGAAGGA	CAGAAGAGGT	16260
GAGCTGCTCA	CCTTATATCT	GTTGTTCCTT	TTACACAGTG	TACAGTATTC	ATTTATTTCC	16320
TCTGCTCACA	GTCTGTGGTA	ACCGTGTGCA	TCTGTGGCTG	TGTTGTTTGT	TTACTTTCCC	16380
TTAAGTTATT	TCCATGTTAA	TCTCATGGAG	AAGAGCAATA	GAAACAAGTA	CTGTATTCAG	16440
TATGTTTTTT	AATATAGACT	ATGGATTCTA	ACAGCTATGA	TGTATTTTAA	CAAGTAACAA	16500
AATATATCTT	ACTTTGACAT	GTCACTTTGT	ТААСАТТАСТ	TTTTGGTGAT	ATTAGGTCAT	16560
		TORUZ	THINE SHEET	(Rule 26)		

AATTTCTATA CCATTAGTTA CTTCTGATTT CTAGGCCACA GTTCCCTTTA AATATTCTTT 16620 GTGTTGTTTT TCCCCTAGTG TATAAAATGT CAACCCTTTG TGGCTTTATA TGGATTTTAT 16680 GGATTTTCAG CCCTTAAATG TAAAGTCTCT ATGGCCTGAG ATGTTGTGTC TGTGGTTTAA 16740 GCTGGACTGC TGAGTCCCTG GTCACTAGAG AGTAGGGGGA CATGGGTACT TGTCTGCAGA 16800 AGTGTGGCAC ATTTTGCCTA GAATGACAGT AAGGCTGCTA TCAAAGAGCA TGAGAGAAAG 16860 AGAAAGAGAT CATCTAACAT TCTAAGAAGT GATTATTACA TTTGAGTTTT AAAAATGTTA 16920 CTATTCGAAG CAGTGTTTTT ATCATAATTT TCTATTTTAT CAAATCAGAC TTGAGTTTTT 16980 TTTCTGATTC TGTTATTTAA CCATACACAA TTTTCCCTGT GTAATTAAGT AATGGAACAC 17040 TTGGAGGCAT ATGAAGTCCC ACTAAGTAGG GAGCATTTGA GTCAGAAAAG TGGGTACTCT 17100 CTTCCTTTAT GTGATGTCCA TCTGCCATTG TATTTGGTAA GGAATAGTGA GGTGTTACCA 17160 TACTGTGTAC AGATTTCCCT CACTTTTCCA CCTCTCACTT TCCTAAACTT GGGAACTAAA 17220 CATTGGATTA ATACAGTGTC TTTGCTGTTC AGATTCACTT GCCAGATTTT ATCAAATGTA 17280 GACTTAAATA GGTTTTATTG TGATAGATAT TTACTTGCTC CCTAAAACTG CTCTCTTAAC 17340 CAGCCTTACA ATAAAGTCAA AAGTCAAAGT GGTAGGCTTC AAGATGAAAC ATAAGATCTG 17400 TTGACTCCTT CCTCTATTTA GTATATATTT TCATAATATT CAGCCTTTTC TTGCCCCAGA 17460 TATCATATCT ATTTTACCTA CCCAATATTT AAGTAGTTC CATGTTGTGA TTAAGAAAAC 17520 AAAATTACCA TAATTACCTA GATTATTGCT AATTGTGACA TATGTAAAGT CTATTAATGT 17580 AATAAATCTC CTTTCTTAAG TCAAAAAATA ATTTTGTGTA ATTCCAAACA GGAAACTGAA 17640 AAGGCATAGG TATTCTCAGC AGTCTCTAAA GTCCCAAAAT CTAATGGCAA TTTTACCAGA 17700 GCAGATCTTT AGAAGTATTG CTATAAATTT GGATATCCCA TTCTAATTTT AAGCCAAATG 17760 CTTTTTGAGA AATAAGCCAG CTGTTTGGAA ATGCTTGTAT TATAATCGGT TTGATAAGCA 17820 GTTATGTCTT ATGCAGATGA ATTAGGGGCT ACCTGTTTTT ATGCACTGGT CTTTGGGGTG 17880 CTTTTGAACA GTAGTGTCTG ATGTTTTAAT TGTCAAAGCA AAAAGAAATG AGAGGGAGGG 17940 SUBSTITUTE SHEET (Rule 26)

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CAACTTTCT TCCTCTCTG AATTCCAGGA AACTGGTTAT TTTCTCATGC CATATGATTT 18000
TAAAATATAT TCCCAGCCAG GTGCAGTGGG TCACGCTTGT AATCCCAGAT TTTTGGGATG 18060
CCAAGCGGGG GGA 18073

(2) INFORMATION FOR SEQ ID NO:13:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 7505 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

TCCGAGCTCC ACGCGGTGGC GGCCGCTCTA GAACTAGTGG ATCCCTCTGG TGGCCCATTG 60 AGAATCAAAA CTTGCAGTGA GTGACTCTAT AAAATGGAAA ATTGAATCAA GTCTGAAAAT 120 GATCCACATA GTTCTACAGC AGGGCTGGAC ACCGTGGTCA GGACCTCAAT ATATTCTGCT 180 TCCACAGAAT TCAGACAGTT CAGAGTTTGG TGAATTAACC TCAAAGGCAG CAAGATATCT 240 GTCCCGGGAG TCAGCAGGTA AGCATAGCAG AAATGGCTGG AGCAGCGGGA GCCTGCTTTC 300 CTTCTGTTGG CTGCTAGCGT CCACTCCATT ATAGCTCCTG ATGGAAGATT TCTACAGAGT 360 GATGCCTCAG AATCTTCCTT ATACCTTTCT TCCATGATCC TTGCACCTCT TTTTCTAGAT 420 TTGCCCACAT TCTTATGTGC AAGTAACTAG ATATACATTA TCAGACAAGC TAGCAGACCT 480 GCATATATCC ACTTCCCTAC TTTTCCTATA ATTTCTTCAC CTGAACCTCT ATCATTCTTC 540 TCTTTCTGTG TTGACTCTGG TGTTAACCTT GCAGGCAAGT TGAGCGTGGG TTTGGTGTCA 600 CAGTGAAGGA CTAAGGGAAT AGTTAGCCTT CTATTTATTA ACAAATCTTC CCTTTGATGT 660 CTGGATCAGT GTCTCTCTAA TAGGAATTAT TGGCATGTTA AGGCAAAGAA CATATGCTTA 720 TTGAGTGCTG ACTGATTGGG GTTAATACTA ATTTGATACT ATTAAGGTGT GGGGCCCAGG 780 AATGCCAAAA TTCTACCTCA ATGTAGAGCC ACCATTCCCC TTGAGGTAAC CTAGGTGGGA 840

TTTTATTTTT TATTTAATTT TTTTGAGATG GAGTCTTGCT CTGTTGCTAG GCTGTAGCGC 9	60
AGTGGCACAA TGAAAGTATC ACTTTATTAT TATCTGAGCT TGTGCCCTAA ACTTCACTGC 103	20
AGAATATGCT GGTAAAATGG ACTGGATTAC AGGATTTAGA GGCAAGGTCC ACAGGTCAGG 10	80
ATAAGAGGTA AAGAGGGAAA TCTTTCTCTC TTCCTAAGCC CAAACCCTCC ATGACAATTG 11	40
AGATTAAAAA AAAAAAATAA ACTGATGAGA GAATCCAAGC ACAGTTGATC AAAGAGGAAA 12	00
GAGAAATGAT GATGTTTCCC TCTTTCTTTT TCATGAGAAA GTGGCTCTCT TATTGATCGG 12	60
CTACTTGATT AGAGAAACAG TGGGGGAAAG AACTGCCATA TCCACATGTG CAATTTTTTA 13	20
AAACACACAG TGATTCTGAA CACTAGTATA AATTCCCAGT CAGTGTTCTG GCCATCTGAC 13	80
TACTCAGGTT ATAATACCTA ATTTTTACAA GGGAGTTGGG AAGTGTGCCA AACCTGTAGA 14	40
AGTCTATATC TACTGTATTC AGATTTTATA TGCATTATTT TATATAACCT TTTGACCTCT 15	00
CTCCTCTATC ATCACTTGAG TGATTTCATC CAGCGTCATC ATTTAACATA TTTTAAATAA 15	60
CTCTATATAC TGATAATTCC CAAATTTATA TCTCCATCCC CGATTGTTCT CCTAACCTCC 16	20
AGCCTCTAAT ATCCAACTGC CTACTCAAGC CTCAGCAATG GTGAGCGCCC CTGCCCCAGC 16	80
CTCGCTGCTG CCTTGCAGCT CGATCTCAGA CTGCTGTGCT GGCAATGAGC GAGGCTCCGT 17	40
GGGCGTGGGA CCTTCCGAGC CAGGCGCAGG ATATAATCTC CTGGTGTGCT GTTTGCTAAG 18	00
ACCGTTGGAA AAGCACAGTA TTAGGGTGGG AGTGACCCAA TTTTCCAGGT GTCGTCTGTC 18	60
ACAGCTTTGC TTGGCTACGA AAGGGAATTC GCTGACCCCT TGCACTTCCT GGGTGAGGCA 193	20
ATGCCTCGCC CTGCTTCGGC TCATGCTCAG TGCGCTGCAC CCACTGTCCT GCACCCAGTG 19	80
TCCGACGAGC CCCAGTGGGA TGAACCCGGT ACCTCAGTTG GAAATACAGA AATCACCCGT 20	40
CTTCTGTGTC CCTCATGCTG GGAGCTGTAG ACTGGAGCTG TTCCTATTTG GCCATCTTGG 21	00
AACTGCCTTG CATTCAGTTT TTAATATCCA ACTGCCTATA CGATATCTTC ACTTGGATTT 21	60
TGAATAGGCA TATCAAACTT GTCATGTTCA AAAGTGAGGT TCTAATCTTC CCTCCCAAAC 223	20

CTGCTTCTCC	CATGGCTTTC	CCCATCTCAG	TAAATAGGAA	TTTCATCCTT	CCAATTGCTC	2280
ATGCCAAAAA	TTTGGGAGTT	ATCCTTGACT	CTTCTCTTTC	TCACACCCCA	CATTCAATCC	2340
ATCACCACAT	TCTGATGCCT	CTATCTTCAA	GATATACTTA	GACTTTCACC	ACTTTTCTTC	2400
ACTCTGCAAT	TACCACTTTG	GTCCAAGCCA	CTGTTATCTC	TTTCTTGGAT	TATTGTAATA	2460
GCTTCCTAAT	AATTTGTCCC	CTTTCTTCCA	CCTTTGTTTC	CCCTACAGTA	TAATCTTAAC	2520
GAAGCAGCCA	GAATGGTTGC	СТАСАААССТ	TTAAAATGGT	AAGCCAGAAC	ATGTAGGTAT	2580
ATTCAAAACC	TTCCAATGGC	TTGTCATGGA	ACTAAAAGTC	TCTACATTGG	CCTATAAGAC	2640
CCTATGTCAT	CTACCCCTAG	TCTCCTCCTT	TCTAACTTCA	TCTCCTGCTA	TGCTGTCCTT	2700
CAACTCACTC	TGCTCCAGGT	GCTCTGGCCT	CCTCAAACAC	ACCACACACA	CTTGCAGCTC	2760
ACAGTCTTGG	CACTTGCTGT	TCTTCTCCTC	TAGGACCTTC	TTCCTCCAAC	TGTCTGGTTC	2820
ACCCACCCCT	TCCTTCTGGA	TTTCTGCTCT	GATGTCATTT	TATCAGTGGG	CACTTCCCAA	2880
TTTCTCTATT	TAAGACCACA	ATTCCAGGCC	AGGGTGGTGG	TTCATGCCTG	TAATCCCAGC	2940
ACTTTGGGAA	GCCGAGGTGG	GCAGATCATG	AGGTCAAGAA	TTCGAGACCA	GCTTGGCCAA	3000
CATGGTGAAA	CCCCATCTCT	АСТАААААТА	САААААААТ	TAGCCAGGTG	TGGTGGCACA	3060
TGCCTGTAAT	CTCAGCTACT	TAGGAGGCTG	AGGCAGGAGA	ATCGCTTGAA	CCTGGGGGGC	3120
AGAGGTTGTA	GTGAGCCGAG	ATTGCGCCAC	TGCACTTCAG	CCTGGGCAAT	AGAGCGAGAC	3180
TCTGTCTCAA	ААААААААА	AAATTTGCTG	TTATTTCCTA	ТАСТАТТТТТ	GTAAGGCAAG	3240
GACCTTATTA	TTTTCCTTGA	TAATACCTCT	CACACTTTAT	AATTACATAT	TTGACTTTGT	3300
TGATTAATGA	ATATCCCTCC	TTTATAGCAT	AAATTCCACA	AGAGCAAGGA	TTACATGTCT	3360
GCTTCATTCT	CACTGTACAC	СТААААССТА	GCACAGGGTC	TCACACATAA	CAGGCACAAA	3420
ACAAACAATG	GATTACGTTG	AGCCAAAGAA	СААААААА	TAGTAATTTA	TCACTAAATG	3480
TCTTTGTTAA	ATTCCAACAA	CAGGGGGCAG	TATATCAGGT	ATTATAAGAA	AGTAATTAGG	3540
CACATCCCAG	CACTTTGGGA	GGCCGAGGCG	GGTGGATCAC	AAGGTCAGGA	GTTCAAGACC	3600

GGCACACCCC TCTGGTCCCA GCTACTCAGG AGGCTGAGGC AGGAGAATCG CTTGTACCCA 3720 GGAGGCGGAG GTTTCAGTGA GCCAAGATCG TGCCACTGCA CTCCAGCCTG GGTGACGGAG 3780 CGAGACTCTG CCTCAAAAAA AAAAAAAAAA AGAAGAAGAA GAAAGTAATT AGGCACCTTT 3840 GGCTTAAGGAC ACTGGGCTAA ATCCATGAAT TTACTTCATC TTCCCCCAAA GCACACTGAC 3900 ATGGTAGAGA AAATATAAAA ATCCATGAAT TTACTTCATC TTCCCCCAAA GCACACTGAC 3960 GTGGCATATG TAGATCAGAA TCTTTGAGAG ATTCTGGAA GACAAAACAG ACCAGACTCG 4020 ATGTCCAAGA GATCAAACAG AGCCAAAGAG CCTCCAAGCTC AGAGGATTG GGACTAGGT TTGAAAGTGG 4140 ACCAGTTGGG CCTGGAAACA CCTCAAGCTC AGAGGCATTG GGGACTGGGG TTGAAAGTGG 4200 ACCATGAGGT ACCAGGATGG TACTTAAGCA AAGGCCTGCC AACCCAGCAC CAGTACACCC 4200 ACAGAGCCCAAA TGACAAGCGG GGCTTCCCAT CTAGACTCAG CTGGAAAAAA AACATATGCT 4320 ACAGAGTAGA GAGTTTGTCA CAGAGACTGG TAAGGGCTTC TTTTTTACAA AACATATGCT 4320 GCATATATAT TTTCTCAACG TCACACTAAT GACATTTTGG GCTATACAAT TCTCTCTTAT 4380 GTGGGGTCTG CATGCACT GTAGGACATT TAACAATATC CCTAGCCTCT AATTATTAGA 4440 TGTCTGTAGC AAATTCCCAA TTTTGATGAC CAAAAGTATC CCTAGCCTCT AATTACTTA AAAAAGTAAC 4500 TTTTGTGGGGG AAATTCCCAA TTTTGATGAC CAATAATACTAT TATCCAATTT AGGTATGTTT 4620 CACCAAGGAG TCAAGAATAAC AATAATACTAT TATCCAATTT AAAAAGTAC	AGCCTGGCCA	ATATGGTGAA	ACCCCGTCTC	TGCTAAAAAT	ACAAAATTAG	CGGGTGTGGT	3660
CGAGACTCTG CCTCAAAAAA AAAAAAAAA AGAAGAAGAA GAAAGTAATT AGGCACCTTT 3840 GGCTTAAGAC ACTGGGCTAA ATCCATGAAT TTACTTCATC TTCCCCCAAA GCACACTGAC 3900 ATGGTAGAAG AAATATAAAA ATACTAATGA ATCAACAGCA TATCTGAAAG GCAGCAAACG 3960 GTGGCATATG TAGATCAGAA TCTTTGAGAG ATTCTGGAA GACAAAACAG ACCAGACTCG 4020 ATGTCCAAGA GATCAAACAG AGCCAAAGAG CCTCCAGCTG AAAACTAAGT ACTAGTTCTA 4080 CCAGTTTGGG CCTGGAAACA CCTCAAGGTC AGAGGGAATT GGGACTGGGG TTGAAAGTGG 4140 ACCTTGAGGT ACCAGGATGG TACTTAAGCA AAGGCCTGCC AACCCAGCAC CAGTACACCC 4200 ACAGCCCAAA TGACAAGCGG GGCTTCCCAT CTAGACTCAG CTGGAAAAAC AGTGCTCTAC 4260 ACAGAGTAGA GAGTTTGTCA CAGAGACTGG TAAGGGCTTC TTTTTTACAA AACATATGCT 4380 GCATATATAT TTTCTCAACG TCACACTAAT GACATTTTGG GCTATACAAT TCTCTGTTAT 4380 GTGGGTCTGT CATGTGCACT GTAGGACATT TAACAATATC CCTAGCCTCT AATTTATGA 4440 TGTCTGTAGC AAATTCCCAA TTTTGATGAC CAAAAGTATC TCCAAGCATT GCTAAATGCC 4500 TTTGTGGGGG AAATAGCCCC CAGTAAGGAA CCACTGGTCT ATACTCACGC CATTCTAACT 4620 CAACAAGAGA TCAAGATTCT TAACATAAAC ATAATACTAT TATCCAAGTTT AAGAAATGCC 4680 ACTAATTCTT TAGGACAATC TAACATAACA ATAATACTAT TATCCAATTT AAAAAAGTAAC 4680 ACTAATTCCT TAGTATCATC TAACATAAAC ATAATACTAT TATCCAATTT AAAAAAGTAAC 4680 ACTAATTCCT TAGTATCATC TAACATTAACA ATGACCA GAGCAGGTCT ACACTGCATA 4800 CATAAATGCT TTTTTTTGT TTTGGTTAGA ATTGACACCA GAGCAGGAC AGAAAAAAAAC 4860 CATAGTATG CCCCAAGCTAA TTCTAGGCAA CCACCAGGAG GCCTGCAGAC AGAAAAAAAAAA	GGCACACCCC	TCTGGTCCCA	GCTACTCAGG	AGGCTGAGGC	AGGAGAATCG	CTTGTACCCA	3720
GGCTTAAGAC ACTGGGCTAA ATCCATGAAT TTACTTCATC TTCCCCCAAA GCACACTGAC 3900 ATGGTAGAAG AAATATAAAA ATACTAATGA ATCAACAGCA TATCTGAAAG GCAGCAAACG 3960 GTGGCATATG TAGATCAGAA TCTTTGAGAG ATTTCTGGAA GACAAAACAG ACCAGACTCG 4020 ATGTCCAAGA GATCAAACAG AGCCAAAGAG CCTCCAGCTG AAAACTAAGT ACTAGTTCTA 4080 CCAGTTTGGG CCTGGAAACA CCTCAAGCTC AGAGGGAATT GGGACTGGGG TTGAAAGTGG 4140 ACCTTGAGGT ACCAGGATGG TACTTAAGCA AAGGCCTGCC AACCCAGCAC CAGTACACCC 4200 ACAGCCCAAA TGACAAGCGG GGCTTCCCAT CTAGACTCAG CTGGAAAAAC AGTGCTCTAC 4320 GCATATATAT TTTCTCAACG TCACACTAAT GACATTTTGG GCTATACAAT TCTCTGTTAT 4380 GTGGGTCTGT CATGTGCACT GTAGGACATT TAACAATATC CCTAGCCTCT AATTATTAGA 4440 TGTCTGTAGC AAATTCCCAA TTTTGATGAC CAAAAGTATC TCCAAGCATT GCTAAATGCC 4500 GAATTCTTTT AAGGCAAATC CGAGACCTAG CATTTCAAAT GCAATTACTT AGGTATGTAT 4620 GAATTCTTTT AAGGCAAATC CGAGACCTAG CATTTCAAAT GCAATTACTT AGGTATGTAT 4680 ACTAAATTCC TAGTATCATC TAACATAAAC ATAATACTAT TATCCAATTT AAAAAGTAAC 4680 ACTAAATTCCT TAGTATCATC TAACATAAAC ATAATACTAC CTGAGGTCT ACACTGCATA 4740 CATAAATGCT TTTTTTTTT TTTGGTTAGA ATTGACACCA GAGCAGGTCT ACACTGCATA 4800 CATAGTAGTG CCCAAGCTAA TTCTAGGCAA CCACAAGAGA GGAAAGGAAA	GGAGGCGGAG	GTTTCAGTGA	GCCAAGATCG	TGCCACTGCA	CTCCAGCCTG	GGTGACGGAG	3780
ATGGTAGAAG AAATATAAAA ATACTAATGA ATCAACAGCA TATCTGAAAG GCAGCAAACG 3960 GTGGCATATG TAGATCAGAA TCTTTGAGAG ATTTCTGGAA GACAAAACAG ACCAGACTCG 4020 ATGTCCAAGA GATCAAACAG AGCCAAAGAG CCTCCAGCTG AAAACTAAGT ACTAGTTCTA 4080 CCAGTTTGGG CCTGGAAACA CCTCAAGCTC AGAGGGAATT GGGACTGGG TTGAAAGTGG 4140 ACCTTGAGGT ACCAGGATGG TACTTAAGCA AAGGCCTGCC AACCCAGCAC CAGTACACCC 4200 ACAGCCCAAA TGACAAGCGG GGCTTCCCAT CTAGACTCAG CTGGAAAAAC AGTGCTCTAC 4260 ACAGAGTAGA GAGTTTGTCA CAGAGACTGG TAAGGGCTTC TTTTTTACAA AACATATGCT 4320 GCATATATAT TTTCTCAACG TCACACTAAT GACATTTTGG GCTATACAAT TCTCTGTTAT 4380 GTGGGTCTG CATGTGCACT GTAGGACATT TAACAATATC CCTAGCCTCT AATTATTAGA 4440 TGTCTGTAGC AAATTCCCAA TTTTGATGAC CAAAAGTATC TCCAAGCATT GCTAAATGCC 4500 TTTGTGGGGG AAATAGCCCC CAGTAAGGAA CCACTGGTCT ATACTCACGC CATTCTAACT 4620 GAATTCTTT AAGGCAAATC CGAGACCTAG CATTTCAAAT GCAATTACTT AGGTATGTAT 4620 CACCAAGAGA TCAAGATTCT TAACAATAAC ATAATACTAT TATCCAAGTT AAAAAGTAAC 4680 ACTAATTCCT TAGTATCATC TAACATAAAC ATAATACTAT TATCCAAGTT ACACTGCATA 4800 CATAAATGCT TTTTTTTTGT TTTGGTTAGA ATTGACACCA GAGCAGGACA AGAAAAAAAAC 4860 CATAATGTG CCCAAGCTAA TTCTAGGCAA CCACAGAGA GGAAAGGAAA	CGAGACTCTG	CCTCAAAAAA	АААААААА	AGAAGAAGAA	GAAAGTAATT	AGGCACCTTT	3840
GTGGCATATG TAGATCAGAA TCTTTGAGAG ATTTCTGGAA GACAAAACAG ACCAGACTCG 4020 ATGTCCAAGA GATCAAACAG AGCCAAAGAG CCTCCAGCTG AAAACTAAGT ACTAGTTCTA 4080 CCAGTTTGGG CCTGGAAACA CCTCAAGCTC AGAGGGAATT GGGACTGGGG TTGAAAGTGG 4140 ACCTTGAGGT ACCAGGATGG TACTTAAGCA AAGGCCTGCC AACCCAGCAC CAGTACACCC 4200 ACAGCCCAAA TGACAAGCGG GGCTTCCCAT CTAGACTCAG CTGGAAAAAC AGTGCTCTAC 4260 ACAGAGTAGA GAGTTTGTCA CAGAGACTGG TAAGGGCTTC TTTTTTACAA AACATATGCT 4320 GCATATATAT TTTCTCAACG TCACACTAAT GACATTTTGG GCTATACAAT TCTCTGTTAT 4380 GTGGGTCTGT CATGTGCACT GTAGGACATT TAACAATATC CCTAGCCTCT AATTATTAGA 4440 TGTCTGTAGC AAATTCCCAA TTTTGATGAC CAAAAGTATC TCCAAGCATT GCTAAATGCC 4500 TTTGTGGGGG AAATAGCCCC CAGTAAGGAA CCACTGGTCT ATACTCACGC CATTCTAACT 4560 GAATTCTTTT AAGGCAAATC CGAGACCTAG CATTTCAAAT GCAAATTACTT AGGTATGTAT 4620 ACTAAATGCT TAGTATCATC TAACATAAAC ATAATACTAT TATCCAAGTT AAAAAGGTAAC 4680 ACTAAATCCT TAGTATCATC TAACATAAAC ATTAACTAC TTGAATTTCC CTGAGTGTCT 4740 CATAAATGCT TTTTTTTGT TTTGGTTAGA ATTGACACCA GAGCAGGACA AGAAAAAAAAC CATAGTAGTG CCCAAGCTAA TTCTAGGCAA CCACCAGGAG GCCTGCAGAC AGAAAAAAAAC CATAGTAGTG CCCAAGCTAA TTCTAGGCAA CCACCAGGAG GGAAAGGAAA	GGCTTAAGAC	ACTGGGCTAA	ATCCATGAAT	TTACTTCATC	TTCCCCCAAA	GCACACTGAC	3900
ATGTCCAAGA GATCAAACAG AGCCAAAGAG CCTCCAGCTG AAAACTAAGT ACTAGTTCTA 4080 CCAGTTTGGG CCTGGAAACA CCTCAAGCTC AGAGGGAATT GGGACTGGGG TTGAAAGTGG 4140 ACCTTGAGGT ACCAGGATGG TACTTAAGCA AAGGCCTGCC AACCCAGCAC CAGTACACCC 4200 ACAGCCCAAA TGACAAGCGG GGCTTCCCAT CTAGACTCAG CTGGAAAAAC AGTGCTCTAC 4260 ACAGAGTAGA GAGTTTGTCA CAGAGACTGG TAAGGGCTTC TTTTTTACAA AACATATGCT 4320 GCATATATAT TTTCTCAACG TCACACTAAT GACATTTTGG GCTATACAAT TCTCTGTTAT 4380 GTGGGTCTGT CATGTGCACT GTAGGACATT TAACAATATC CCTAGCCTCT AATTATTAGA 4440 TGTCTGTAGC AAATTCCCAA TTTTGATGAC CAAAAGTATC TCCAAGCATT GCTAAATGCC 4500 TTTGTGGGGG AAATAGCCCC CAGTAAGGAA CCACTGGTCT ATACTCACGC CATTCTAACT 4620 GAATTCTTTT AAGGCAAATC CGAGACCTAG CATTTCAAAT GCAATTACTT AGGTATGTAT 4620 CACCAAGAGA TCAAGATTCT TAACATAAAC ATAATACTAT TATCCAATTT AAAAAGTAAC 4680 ACTAATTCCT TAGTATCATC TAATATTATT CAGTTACTGC TTGAATTCC CTGAGTGTCT 4740 CATAAATGCT TTTTTTTGT TTTGGTTAGA ATTGACACCA GAGCAGGTCT ACACTGCATA 4800 TGATTGTTAA GTATATTGG TCCACAGAAG GTCTCCTGGG GCCTGCAGAC AGAAAAAAAC 4860 CATAGTAGTG CCCAAGCTAA TTCTAGGCAA CCACAAGAGA GGAAAGGAAA	ATGGTAGAAG	AAATATAAA	ATACTAATGA	ATCAACAGCA	TATCTGAAAG	GCAGCAAACG	3960
CCAGTTTGGG CCTGGAAACA CCTCAAGCTC AGAGGGAATT GGGACTGGG TTGAAAGTGG 4140 ACCTTGAGGT ACCAGGATGG TACTTAAGCA AAGGCCTGCC AACCCAGCAC CAGTACACCC 4200 ACAGCCCAAA TGACAAGCGG GGCTTCCCAT CTAGACTCAG CTGGAAAAAC AGTGCTCTAC 4260 ACAGAGTAGA GAGTTTGTCA CAGAGACTGG TAAGGGCTTC TTTTTTACAA AACATATGCT 4320 GCATATATAT TTTCTCAACG TCACACTAAT GACATTTTGG GCTATACAAT TCTCTGTTAT 4380 GTGGGTCTGT CATGTGCACT GTAGGACATT TAACAATATC CCTAGCCTCT AATTATTAGA 4440 TGTCTGTAGC AAATTCCCAA TTTTGATGAC CAAAAGTATC TCCAAGCATT GCTAAATGCC 4500 TTTGTGGGGG AAATAGCCCC CAGTAAGGAA CCACTGGTCT ATACTCACGC CATTCTAACT 4620 GAATTCTTTT AAGGCAAATC CGAGACCTAG CATTTCAAAT GCAATTACTT AGGTATGTAT 4620 CACCAAGAGA TCAAGATTCT TAACATAAAC ATAATACTAT TATCCAATTT AAAAAGTAAC 4680 ACTAATTCCT TAGTATCATC TAATATTATT CAGTTACTGC TTGAATTCC CTGAGTGTCT 4740 CATAAATGCT TTTTTTTTGT TTTGGTTAGA ATTGACACCA GAGCAGGTCT ACACTGCATA 4800 CGATAGTAGTG CCCAAGCTAA TTCTAGGCAA CCACAAGAGA GGAAAGGAAA	GTGGCATATG	TAGATCAGAA	TCTTTGAGAG	ATTTCTGGAA	GACAAAACAG	ACCAGACTCG	4020
ACCTTGAGGT ACCAGGATGG TACTTAAGCA AAGGCCTGCC AACCCAGCAC CAGTACACCC 4200 ACAGCCCAAA TGACAAGCGG GGCTTCCCAT CTAGACTCAG CTGGAAAAAC AGTGCTCTAC 4260 ACAGAGTAGA GAGTTTGTCA CAGAGACTGG TAAGGGCTTC TTTTTTACAA AACATATGCT 4320 GCATATATAT TTTCTCAACG TCACACTAAT GACATTTTGG GCTATACAAT TCTCTGTTAT 4380 GTGGGTCTGT CATGTGCACT GTAGGACATT TAACAATATC CCTAGCCTCT AATTATTAGA 4440 TGTCTGTAGC AAATTCCCAA TTTTGATGAC CAAAAGTATC TCCAAGCATT GCTAAATGCC 4500 TTTGTGGGGG AAATAGCCCC CAGTAAGGAA CCACTGGTCT ATACTCACGC CATTCTAACT 4620 GAATTCTTTT AAGGCAAATC CGAGACCTAG CATTCAAAT GCAATTACTT AGGTATGTAT 4620 CACCAAGAGA TCAAGATTCT TAACATAAAC ATAATACTAT TATCCAATTT AAAAAGTAAC 4680 ACTAATTCCT TAGTATCATC TAATATTATT CAGTTACTGC TTGAATTTCC CTGAGTGTCT 4740 CATAAATGCT TTTTTTTGT TTTGGTTAGA ATTGACACCA GAGCAGGTCT ACACTGCATA 4800 CATAGTAGTG CCCAAGCTAA TCCACAGAAG GTCTCCTGGG GCCTGCAGAC AGAAAAAAAC 4860 CATAGTAGTG CCCAAGCTAA TTCTAGGCAA CCACAAGAGA GGAAAGGAAA	ATGTCCAAGA	GATCAAACAG	AGCCAAAGAG	CCTCCAGCTG	AAAACTAAGT	ACTAGTTCTA	4080
ACAGCCCAAA TGACAAGCGG GGCTTCCCAT CTAGACTCAG CTGGAAAAAC AGTGCTCTAC 4260 ACAGAGTAGA GAGTTTGTCA CAGAGACTGG TAAGGGCTTC TTTTTTACAA AACATATGCT 4320 GCATATATAT TTTCTCAACG TCACACTAAT GACATTTTGG GCTATACAAT TCTCTGTTAT 4380 GTGGGTCTGT CATGTGCACT GTAGGACATT TAACAATATC CCTAGCCTCT AATTATTAGA 4440 TGTCTGTAGC AAATTCCCAA TTTTGATGAC CAAAAGTATC TCCAAGCATT GCTAAATGCC 4500 TTTGTGGGGG AAATAGCCCC CAGTAAGGAA CCACTGGTCT ATACTCACGC CATTCTAACT 4560 GAATTCTTTT AAGGCAAATC CGAGACCTAG CATTTCAAAT GCAATTACTT AGGTATGTAT 4620 CACCAAGAGA TCAAGATTCT TAACATAAAC ATAATACTAT TATCCAATTT AAAAAGTAAC 4680 ACTAATTCCT TAGTATCATC TAATATTATT CAGTTACTGC TTGAATTTCC CTGAGTGTCT 4740 CATAAATGCT TTTTTTTTGT TTTGGTTAGA ATTGACACCA GAGCAGGTCT ACACTGCATA 4800 CATAGTAGTG CCCAAGCTAA TTCTAGGCAA CCACAAGAGA GGAAAGGAAA	CCAGTTTGGG	CCTGGAAACA	CCTCAAGCTC	AGAGGGAATT	GGGACTGGGG	TTGAAAGTGG	4140
ACAGAGTAGA GAGTTGTCA CAGAGACTGG TAAGGGCTTC TTTTTTACAA AACATATGCT 4320 GCATATATAT TTTCTCAACG TCACACTAAT GACATTTTGG GCTATACAAT TCTCTGTTAT 4380 GTGGGTCTGT CATGTGCACT GTAGGACATT TAACAATATC CCTAGCCTCT AATTATTAGA 4440 TGTCTGTAGC AAATTCCCAA TTTTGATGAC CAAAAGTATC TCCAAGCATT GCTAAATGCC 4500 TTTGTGGGGG AAATAGCCCC CAGTAAGGAA CCACTGGTCT ATACTCACGC CATTCTAACT 4560 GAATTCTTT AAGGCAAATC CGAGACCTAG CATTTCAAAT GCAATTACTT AGGTATGTAT 4620 CACCAAGAGA TCAAGATTCT TAACATAAAC ATAATACTAT TATCCAATTT AAAAAGTAAC 4680 ACTAATTCCT TAGTATCATC TAATATTATT CAGTTACTGC TTGAATTCC CTGAGTGTCT 4740 CATAAATGCT TTTTTTTGT TTTGGTTAGA ATTGACACCA GAGCAGGTCT ACACTGCATA 4800 TGATTGTTAA GTATATTGGG TCCACAGAAG GTCTCCTGGG GCCTGCAGAC AGAAAAAAAC 4860 CATAGTAGTG CCCAAGCTAA TTCTAGGCAA CCACAAGAGA GGAAAGGAAA	ACCTTGAGGT	ACCAGGATGG	TACTTAAGCA	AAGGCCTGCC	AACCCAGCAC	CAGTACACCC	4200
GCATATATAT TTTCTCAACG TCACACTAAT GACATTTTGG GCTATACAAT TCTCTGTTAT 4380 GTGGGTCTGT CATGTGCACT GTAGGACATT TAACAATATC CCTAGCCTCT AATTATTAGA 4440 TGTCTGTAGC AAATTCCCAA TTTTGATGAC CAAAAGTATC TCCAAGCATT GCTAAATGCC 4500 TTTGTGGGGGG AAATAGCCCC CAGTAAGGAA CCACTGGTCT ATACTCACGC CATTCTAACT 4560 GAATTCTTTT AAGGCAAATC CGAGACCTAG CATTCAAAT GCAATTACTT AGGTATGTAT 4620 CACCAAGAGA TCAAGATTCT TAACATAAAC ATAATACTAT TATCCAATTT AAAAAGTAAC 4680 ACTAATTCCT TAGTATCATC TAATATTATT CAGTTACTGC TTGAATTTCC CTGAGTGTCT 4740 CATAAATGCT TTTTTTTGT TTTGGTTAGA ATTGACACCA GAGCAGGTCT ACACTGCATA 4800 TGATTGTTAA GTATATTGGG TCCACAGAAG GTCTCCTGGG GCCTGCAGAC AGAAAAAAAC 4860 CATAGTAGTG CCCAAGCTAA TTCTAGGCAA CCACAAGAGA GGAAAGGAAA	ACAGCCCAAA	TGACAAGCGG	GGCTTCCCAT	CTAGACTCAG	CTGGAAAAAC	AGTGCTCTAC	4260
GTGGGTCTGT CATGTGCACT GTAGGACATT TAACAATATC CCTAGCCTCT AATTATTAGA 4440 TGTCTGTAGC AAATTCCCAA TTTTGATGAC CAAAAGTATC TCCAAGCATT GCTAAATGCC 4500 TTTGTGGGGG AAATAGCCCC CAGTAAGGAA CCACTGGTCT ATACTCACGC CATTCTAACT 4560 GAATTCTTTT AAGGCAAATC CGAGACCTAG CATTTCAAAT GCAATTACTT AGGTATGTAT 4620 CACCAAGAGA TCAAGATTCT TAACATAAAC ATAATACTAT TATCCAATTT AAAAAGTAAC 4680 ACTAATTCCT TAGTATCATC TAATATTATT CAGTTACTGC TTGAATTTCC CTGAGTGTCT 4740 CATAAATGCT TTTTTTTGT TTTGGTTAGA ATTGACACCA GAGCAGGTCT ACACTGCATA 4800 TGATTGTTAA GTATATTGGG TCCACAGAAG GTCTCCTGGG GCCTGCAGAC AGAAAAAAAC 4860 CATAGTAGTG CCCAAGCTAA TTCTAGGCAA CCACAAGAGA GGAAAGGAAA	ACAGAGTAGA	GAGTTTGTCA	CAGAGACTGG	TAAGGGCTTC	TTTTTTACAA	AACATATGCT	4320
TGTCTGTAGC AAATTCCCAA TTTTGATGAC CAAAAGTATC TCCAAGCATT GCTAAATGCC 4500 TTTGTGGGGG AAATAGCCCC CAGTAAGGAA CCACTGGTCT ATACTCACGC CATTCTAACT 4560 GAATTCTTTT AAGGCAAATC CGAGACCTAG CATTTCAAAT GCAATTACTT AGGTATGTAT 4620 CACCAAGAGA TCAAGATTCT TAACATAAAC ATAATACTAT TATCCAATTT AAAAAGTAAC 4680 ACTAATTCCT TAGTATCATC TAATATTATT CAGTTACTGC TTGAATTTCC CTGAGTGTCT 4740 CATAAATGCT TTTTTTTGT TTTGGTTAGA ATTGACACCA GAGCAGGTCT ACACTGCATA 4800 TGATTGTTAA GTATATTGGG TCCACAGAAG GTCTCCTGGG GCCTGCAGAC AGAAAAAAAC 4860 CATAGTAGTG CCCAAGCTAA TTCTAGGCAA CCACAAGAGA GGAAAGGAAA	GCATATATAT	TTTCTCAACG	TCACACTAAT	GACATTTTGG	GCTATACAAT	TCTCTGTTAT	4380
TTTGTGGGG AAATAGCCCC CAGTAAGGAA CCACTGGTCT ATACTCACGC CATTCTAACT 4560 GAATTCTTT AAGGCAAATC CGAGACCTAG CATTTCAAAT GCAATTACTT AGGTATGTAT 4620 CACCAAGAGA TCAAGATTCT TAACATAAAC ATAATACTAT TATCCAATTT AAAAAAGTAAC 4680 ACTAATTCCT TAGTATCATC TAATATTATT CAGTTACTGC TTGAATTTCC CTGAGTGTCT 4740 CATAAATGCT TTTTTTTGT TTTGGTTAGA ATTGACACCA GAGCAGGTCT ACACTGCATA 4800 TGATTGTTAA GTATATTGGG TCCACAGAAG GTCTCCTGGG GCCTGCAGAC AGAAAAAAAC 4860 CATAGTAGTG CCCAAGCTAA TTCTAGGCAA CCACAAGAGA GGAAAGGAAA	GTGGGTCTGT	CATGTGCACT	GTAGGACATT	TAACAATATC	CCTAGCCTCT	AATTATTAGA	4440
GAATTCTTT AAGGCAAATC CGAGACCTAG CATTTCAAAT GCAATTACTT AGGTATGTAT 4620 CACCAAGAGA TCAAGATTCT TAACATAAAC ATAATACTAT TATCCAATTT AAAAAGTAAC 4680 ACTAATTCCT TAGTATCATC TAATATTATT CAGTTACTGC TTGAATTTCC CTGAGTGTCT 4740 CATAAATGCT TTTTTTTGT TTTGGTTAGA ATTGACACCA GAGCAGGTCT ACACTGCATA 4800 TGATTGTTAA GTATATTGGG TCCACAGAAG GTCTCCTGGG GCCTGCAGAC AGAAAAAAAC 4860 CATAGTAGTG CCCAAGCTAA TTCTAGGCAA CCACAAGAGA GGAAAGGAAA	TGTCTGTAGC	AAATTCCCAA	TTTTGATGAC	CAAAAGTATC	TCCAAGCATT	GCTAAATGCC	4500
CACCAAGAGA TCAAGATTCT TAACATAAAC ATAATACTAT TATCCAATTT AAAAAGTAAC 4680 ACTAATTCCT TAGTATCATC TAATATTATT CAGTTACTGC TTGAATTTCC CTGAGTGTCT 4740 CATAAATGCT TTTTTTTGT TTTGGTTAGA ATTGACACCA GAGCAGGTCT ACACTGCATA 4800 TGATTGTTAA GTATATTGGG TCCACAGAAG GTCTCCTGGG GCCTGCAGAC AGAAAAAAAC 4860 CATAGTAGTG CCCAAGCTAA TTCTAGGCAA CCACAAGAGA GGAAAGGAAA	TTTGTGGGGG	AAATAGCCCC	CAGTAAGGAA	CCACTGGTCT	ATACTCACGC	САТТСТААСТ	4560
ACTAATTCCT TAGTATCATC TAATATTATT CAGTTACTGC TTGAATTTCC CTGAGTGTCT 4740 CATAAATGCT TTTTTTTGT TTTGGTTAGA ATTGACACCA GAGCAGGTCT ACACTGCATA 4800 TGATTGTTAA GTATATTGGG TCCACAGAAG GTCTCCTGGG GCCTGCAGAC AGAAAAAAAC 4860 CATAGTAGTG CCCAAGCTAA TTCTAGGCAA CCACAAGAGA GGAAAGGAAA	GAATTCTTTT	AAGGCAAATC	CGAGACCTAG	CATTTCAAAT	GCAATTACTT	AGGTATGTAT	4620
CATAAATGCT TTTTTTTGT TTTGGTTAGA ATTGACACCA GAGCAGGTCT ACACTGCATA 4800 TGATTGTTAA GTATATTGGG TCCACAGAAG GTCTCCTGGG GCCTGCAGAC AGAAAAAAAC 4860 CATAGTAGTG CCCAAGCTAA TTCTAGGCAA CCACAAGAGA GGAAAGGAAA	CACCAAGAGA	TCAAGATTCT	TAACATAAAC	ATAATACTAT	TATCCAATTT	AAAAAGTAAC	4680
TGATTGTTAA GTATATTGGG TCCACAGAAG GTCTCCTGGG GCCTGCAGAC AGAAAAAAAC 4860 CATAGTAGTG CCCAAGCTAA TTCTAGGCAA CCACAAGAGA GGAAAGGAAA	ACTAATTCCT	TAGTATCATC	TAATATTATT	CAGTTACTGC	TTGAATTTCC	CTGAGTGTCT	4740
CATAGTAGTG CCCAAGCTAA TTCTAGGCAA CCACAAGAGA GGAAAGGAAA	CATAAATGCT	TTTTTTTGT	TTTGGTTAGA	ATTGACACCA	GAGCAGGTCT	ACACTGCATA	4800
	TGATTGTTAA	GTATATTGGG	TCCACAGAAG	GTCTCCTGGG	GCCTGCAGAC	AGAAAAAAAC	4860
CAGCTCGCCT AGAGGATAAC TGCACCCTGC CCCGATTTTC CTGAGCCATC ACTGAACCCC 4980	CATAGTAGTG	CCCAAGCTAA	TTCTAGGCAA	CCACAAGAGA	GGAAAGGAAA	AAGAAAACGG	4920
	CAGCTCGCCT	AGAGGATAAC	TGCACCCTGC	CCCGATTTTC	CTGAGCCATC	ACTGAACCCC	4980

TTCCTGGTTT	AGGACGTATG	TCCATGTTTG	TCTTCTGAAG	GGATGAAGGG	ACACCTATTG	5040
TGAGCACAGT	CTAAGCCACT	CAATGGTCCA	GGGCATAGCT	CAAACAGAGC	AACAGTAGCC	5100
CTGGGAAATG	GAGGTGACAA	AAGAAACAGA	ATAAATCTTT	CAAAATATAC	TGCAATTTGT	5160
GCAACAGGAT	GCCATATTGA	TTTAAAAAAA	ТТТТТТТТСТ	TAAATTTTTT	GTAGAGATGG	5220
GGGGAGGGG	TCTTGTTGTT	GCCCAGGCTG	GTCTTGAACT	CTTGGTCTCA	AGTGATCTTC	5280
TTGCCTTGGC	CTCCCAAAAT	GCTATGATTA	TGTGCGTGAG	CCACTGCTGC	ATTGCGTTTT	5340
TTTTTCTTTT	CTCGAGACGG	AGTCTCACTC	CGTCACCCAG	GCTGAAGTGC	ACTGGCGTGA	5400
TCTTGGTTCA	CTGCAACGGC	CTCCTGGTTC	GAGCGATCCT	CACACCTTAG	CCTCCCTAGT	5460
AGCTGGAACT	GCAGGCCTGG	CTAAGTTTTG	TATTTTTAGT	AGAGACAGGG	TTTCACTATG	5520
TTGGCCAGCC	TGGTCTTGAA	CTCCTGACCT	CAGGTGATCA	GCCTGCCTCA	GCCTCCCAAA	5580
GTGCTGGGAT	TATAGGTGTG	AGCCACTGTG	CCCAGCCTAC	ATTGATATTT	TTTAAAAGCC	5640
ACTATTTAAA	AAGGAGTAAT	CTGAGTAGTA	AGAAGGAGTT	CTTTAAAAAC	TGGCCGGGCA	5700
TGGTGGCTCA	CGCCTGTAAT	CCCAACACTT	TGGGAGGCCG	AGGCAGGCAG	ATCACCTGAG	5760
GTTGGTAGTT	TAAGAGCAGC	CTGACCAACA	TAGAGAAACC	CCATCTCTAC	ТАААААТАСА	5820
AAATTAGCCA	GGTGTGGTGG	CACATGCCTG	TAATCCCAGC	TACTCTGGGG	GCTGAGGCAG	5880
GAGAATCGTT	TGAACCTGGA	AGGCAGAGGT	TGCGGTGAAC	CGAGATCGTG	CCATTGCACA	5940
CCAGCTTGGG	CAACAAGAGC	AAAACTCCGT	СТСААААСАА	AACAAAACAA	AAATGAAAAC	6000
AAACAAAAA	ACACCAACAT	GATTAGGAGG	GAAAAAATCT	AGATAGAAAG	GCTTAACAGG	6060
GCCGGGCACG	GTGGCTCATG	CCTGTAAGCC	CAACACTTTG	GGAGGCCAGG	GTGGGAGGAC	6120
TGCTTGAGGC	CAGGAGTTTG	AGACCAGCCT	GGGCAACTTA	GCGAGACTCT	GGTAGTCTGT	6180
CTCTACCAAA	CAAACAAACA	AACACCTGAT	TAGCTGGGCA	TGGTGGCATA	TGCCTATAGT	6240
CCCAGCTACC	CGGGAGGCTG	AGGCTGGAGG	ATCGCTTGAG	TCCCAGAGGT	CAAGGCTGCA	6300
GTGAGCTGTG	ATCAGGCCAC	TGCACTCCAG	CCTGGGCGAC	AGAGCATGAG	TCTGCCCCAG	6360

CCCTGCCTCC	AAAAAAAGAA	AGGCTAAATA	GGAGAACTGA	TATAACTGAA	AACCAAATTA	6420
GTTGTGTGAA	AGAGCAACTG	TCCTGGAAGC	TCCCAGAACA	CAGAGCAATA	AGAGATGAAA	6480
AATATGACAG	CATAGAAAAG	AAAGGAACTG	GATAGGTCCA	GGAGATCCAA	TACCTGTGCA	6540
ACAGGAGAGT	CCAAAGAAGA	AACCAGTAAG	AAGGGAGAGA	AGTAATACAA	GAAAGTTCCT	6600
GAGTTATCAG	GCCAAAAGAA	ATAATCTAGT	TTGTGGAGTA	ATATTGACAA	AAAAATCTTT	6660
ACACCTAGAT	GTATTCTGAA	AAAATTCTTA	AATTCTAATT	GAAATCAACC	AACGAACCAC	6720
AGGCCAGCCT	TAGAAAACCA	TTTCCAGGGC	ATGGGGTTTT	AGGGTCTGAC	AGACCTGAAG	6780
TTCAAATTCC	TACTATCCTA	ACTTACTAGT	AGTGTGATAA	TCTCTTAGAA	CAATGTATGA	6840
AATGGAAGCA	TAATAGCACC	CTCCACCTTT	TAGAGTTAAT	GGGAGATCTA	AAAGAGGTAA	6900
CATTTGCAAA	GTGTCTGACA	TGAAGGGAAG	AGATTGGCTT	TGGCATCCAC	AAGTTCACAC	6960
ACTAGCAGAG	AACCTCAGTC	CAGCTTCCTA	CGCTCAGGCA	GTTCTTTGCC	TAGAAGAGGG	7020
GTCGGCAAAC	TATAGCCCAA	ATTTAGCCCA	CTGCCTGTTT	TTGTAAATAA	AATGCTATCA	7080
GAACATGGCC	ATGTTCATTC	ATTTACATAC	CATCTATGGC	TGCTTTTACA	TTACAAAGGC	7140
AGAGCTGAGT	AGATGAGACA	GAGACAGTAT	GGTTACAAAC	CGAAACTGTT	TCAACCCCAA	7200
CTTCATTCCA	GCAAAGTTTT	ACTTTCTAGA	TTCAGGCCAG	GGAGCAAGCA	TGAAAATGAA	7260
ААССАСТААА	ATGGTGTCCC	GGGACAACAG	ATACCTACTT	GCTATAACTT	CTTTCCTTGA	7320
AAACAAAGGG	CCATATTAAT	TGAAGGGCTC	ACCTCTAAAC	AGGTGAGTGA	CTTAAGGACT	7380
TCAGACACAC	ACTGGTCAAC	TACAAACTAG	TCAGTAAAGG	AATAGCCATA	GTCCTATAGC	7440
CCCAGTTCCT	ATGGCCCAGG	GGGATCCACT	AGTTCTAGAG	CGGCCGCCAC	CGCGGTGGAC	7500
TCCAG						7505

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(2) INFORMATION FOR SEQ ID NO:14:	
(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 529 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:	
GCTGAGGTGC ATCGCGGTGG CGGACGCTCT AGAACTAGTG GATCCCCAAA CAAAACCTGT	60
CCCTGCTAAT GATGGTAGAC CCAATCAGAT CCCCGGAGAA GCCGAAATAC GGAAACCATA	120
TCAGCATACG CATGGCATAC ATAGAACCCC ATACATGGAT TGCTTACTCA GCCAGATATA	180
GAAATCTATC TTCACGATAG AGATATATAT ATATAGACAC ACTGCATATA CAGATGTGAG	240
ATGGAGGCTC ACTCTGCCAC CCGTGCTGGA TCTACAGTGG CACAAGCTCA GTCCACAGTC	300
ACGTCGATCT GCCGGGCGTG ACCGACTGAG ATGCAGCGGC CTCGGGCGTA GCTGTGAGTA	360
CACGCACCAG TCATCGCGAC TGGCTGCAAG TGGTATAAGC GGAGGGGACA GGGTTACAGC	420
ATGACGCTA GGCAGGCCGC AAACTGAGGA CCACAAGAGT GCCACGCTGC CCGAACGCAT	480
GCAGTGGCGA GATTACATGG GGCAGCCACT AGAGCCGCCG TATCAGAAA	529
(2) INFORMATION FOR SEQ ID NO:15:	
(i) SEQUENCE CHARACTERISTICS:(A) LENGTH: 635 base pairs(B) TYPE: nucleic acid(C) STRANDEDNESS: single(D) TOPOLOGY: linear	
(ii) MOLECULE TYPE: DNA	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:	
TACCACGCGG TAGCGCCGCT CTAGAACTAG TGGATCGGGT AATCCAGCAC TTTGGGAGGC	60
CAAGGAGGGC AGATCACCTG AAGTCAGGAG TTTGAGACCA GCCTGGCCAA CATGGTGAAA	120

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CTCCATCTCT	АСТААААТТА	CAAAAATTAG	CCGGGCGTGG	TGGCGCATGC	CTGTAATCCC	180
AGCTACTCGA	GAGGCTGCGG	CATGACAGTC	ACTCAAGCCC	GGGAGGTAGA	GGTTGCAGTG	240
AGCTGAGATT	GTGCCACTGC	ACTCCAGCCT	GGGTGGCAGA	GTGAGACCCT	GTCTAAAAAA	300
ААААААААА	AAAGGCCCAT	TAGGGGACCC	AAACGGTTCC	CCAGCTTTGT	TGGATTTCCC	360
CAAATTTGGG	GCCAATTTTT	GGAGGGTTGT	CCCTTAAAAA	TTTAAATTTG	GGGGTTTTTT	420
TCCAGGCGCC	CATTAGAAAT	GGGTTCCGAA	AATTTTTTGG	ССААААААТ	TTGGTTTAAC	480
CGCGGACCAA	AATCCTAAGG	ТТТААСТТТТ	TCCTAAACCT	TTTAGAATTT	AAAGTTTCCG	540
GGGTTTCTCA	GGAGGGGGTA	ACCCTTCACC	CCAATATAAC	TCGGAAACCC	CCCTTTTTTA	600
GGAAAAGGGG	AATTAGTGGT	GCTTTCCGGG	CCAAA			635

(2) INFORMATION FOR SEQ ID NO:16:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 938 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

CCCAGGGACC	AAGCGAGTGC	GACCGCTCTA	GAACTAGTGG	ATCCCCCTTG	AAGACTATAT	60
TTCTTTTCAT	CACGTGCTAT	ААААТААТТ	АТААТТТААА	ТТТТТТААТА	ТАААТАТАТА	120
AATTAAAAAT	AGAAAGTAAA	AAAAGAAATT	AAAGAAAAA	TAGTTTTTGG	TTTCCGAAGA	180
TGTATAATAG	GTTGAAAGTT	AGAAATTATT	ATTATAATAG	СААААААААТ	TTAAAGTTAG	240
AAATTAGAAT	TTAAGGCTCT	ACACACGTTT	ACGATGATAT	TGGACGAACG	ACACGATTAG	300
ACAGTTGTAG	GTTGTGTGTT	GTGATGTTTT	TGAGTGATTT	GTAGTGTTTA	ACCTTGTGGT	360
TTGGAAAGGT	NGTATGAGTA	TTAATCTCGG	GCTTATTGGG	AGGTTTATGT	GCAATGCATT	420
TTGTGGTTTT	TTTATAATGT	TGTGTTTAGG	GTTAAAACCT	GTTGTGTATA	TTGTGTTGGT	480
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TTGTTGCTTG	TTTGTACATT	GGTATGATGC	CTNTTTTGCT	TATGGGTTNG	GTGTTTGGTT	540
TTGGTTGTGT	TTTTTGTGGT	GTGTTGTTTG	ATAGTTTTAG	CGGTTGTTTT	TGGGTTGTTG	600
TTTTATGTTG	TGGTGGTGTT	TTGTGTGTAG	AGTTGTGGTT	TGTGTGTTTT	GTTGGTTGTG	660
TTGTGGTATT	GTTTATGTTT	GTCGTGTGTA	TGGTTTGTTG	TTAGTCGTTG	TTGTAGGCTT	720
GTGTGTTGTG	TGTTGTGTGT	GCGTGTGGTC	TAGTTTGGGT	GGTATTGTTG	ATTTAGTGTG	780
ATAGTCTGTT	AGAGTTTGGG	TTGTTGTGTG	TATTGGGTTT	GTCTGTGTGT	GGTTTTTTTG	840
TGGGTGTAGA	TGATGATTTG	TGTATGTGGG	TGAGGTATAT	GTTATTTGTG	GTATTTCGGT	900
TGTGATGTGT	TGGTTATTAT	GTGTTTGTTA	TGTGTATT			938

(2) INFORMATION FOR SEQ ID NO:17:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 1145 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

GTCTCCGAGC	TCACCGCGGT	GGCGGCCGCT	CTAGAACTAG	TGGATCCCCC	GCTCTCACTC	60
CCTGACTCTT	GCCTTCTGTA	ACAACTGGAG	ACAACTCTTT	CAAAACCAGC	TCCAAGCCCC	120
AGACTTCTCT	CTGGGCTTTA	GTTCGTAAGG	CAGGTGCCCT	ACTGAGTGAG	CCTAGATCAG	180
ACAGAAACAT	AGCTGTTGGC	AAGGATTTAG	GTGAATTTCC	TTCCATTGTT	ТТТСТААТАС	240
CTTTTTTTT	TTTTGGAAAA	TATAACCATG	CACCTACACA	CATATTTGAA	TATCCTGCCT	300
ТТТТАТТТАА	AATGACATGA	TAGGTCCGGG	AGTGGTGGCT	CATGCCTGTA	ATCCCAGCAC	360
TTTGGGAGGC	CGAGGTGGGC	AGATCACCTG	AGGTCAGGAG	TTCGAGACCA	GCCTGGCCAA	420
CATGGTGAAA	CTCCATCTCT	АСТАААААТС	AAAAATTAGC	CGGGCATGGT	GGCAGGCTCC	480
CAGCTACTCA	GGAGGCTGAG	ATGTGAAAAT	CGCTTGAACC	CGGGAGGTAG	AGGTTGCAGT	540
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GAGCTGAGAT	CTTGCCATTG	CACTCCAGCC	TGGGCAATAA	GAGCGAAACT	CCATCTCAAA	600
ААААААААА	AAAACCCAGG	GATAAACTTT	CCAAAAGGCC	CCAAAAAGGG	GCATGATTAA	660
GACAATAAAT	TAGTCGAAAA	TTGTCAATAT	AAATGAATAA	ТААТТТТТТТ	GGCCATTCTG	720
CCAAGTGGCA	TAACCCTGTC	ATTCTGCCCA	TTCGGCAACT	CTTTTTCCTC	CCGGGGAATC	780
GCTCCCACTT	TTTGCATGGG	TTTTGGATGG	AACTGTTGGT	CACAGGTTTT	TCACCCCAT	840
TTGGCCCTCC	CAGAGGTGTA	CAAAGTACCC	CAGCCTGGCC	CTTTTTCACC	CAATTTTCCC	900
AGGTATATTC	CCCCGGTTTT	GGTCCCAGGT	TTTAACCCCC	CCCTCCAAAG	GGCTTTGGGT	960
TTTGGAAGGA	TTAAGTCCTC	GAAATAGGCC	CCTCATAATA	CCTGGGGGGG	GGACCTTTTT	1020
CAAAGTTGTG	GGCACCTCTT	GTGTCGCCCC	CACGGGGGAC	TGATGTATTT	ACGCCCCNTT	1080
GGGGNNTAAT	ATGGATTGNT	ATGTATTGGG	CGAGGAGAAA	ATATTTTTGA	TGGGGTTTTT	1140
CTCTT						1145

(2) INFORMATION FOR SEQ ID NO:18:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 852 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

TCACCGCGGT	GGCGGCCGCT	CTAGAACTAG	TGGATCCCCC	GTTTTGCTCT	CTCCTTAGAA	60
TGAGCTGGGA	ACTAGTCACT	CTTGTTTTCT	CACCTATAAT	AGCATCTGGG	TCCAGTGTTT	120
TTTATGTGGG	ACAAATTTGA	ACTTGTGGTC	AACCTCTTTA	ATTGTAAGAA	TATTCAGGTC	180
TTTTGTTCTT	CCTGGGCTAG	TTTTTTATTC	TTTTTCTAGA	GATTCGTTCA	TTTTTCTTAG	240
TTTTATTTGC	CTATAATTGT	GGATAATCTG	TTTTTTATCT	GCTACTTCTG	ТААТТАТТТС	300
CACATTTGAT	ттатаататт	AACTTGTGGG	CCAGGCGTCG	TGGCTCACAC	CTGTAATCCC	360
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AGCACTTTGG	GAGGCCGAGG	CGGGCGGATC	ACGAGGTCAA	GAGATTGAGG	TGAAACCCCC	420
TCTCTACTAA	AAGTAGAAAA	ATTAGCTGGG	CATGGTGGTG	CGTGCCTGTA	ATCCCAGCTA	480
CTCAGGAGAC	TGAGGCAGGG	AATCTCTTGA	ACCCAGGAGG	CAGAGGTTGC	GGTGAGCCAA	540
GATTGCACCA	CGGCACTCCA	GCCTGGTGAC	AGAGCGAGAC	TCCATCTCAA	AAAAAGAAAA	600
ААААААААСТ	GTCAAATGAT	ACTCCAAAAT	GGTTGTACCA	ТТТТАТАТТТ	GCAACAACAA	660
TGTCTGAGGG	TACTGATTGC	TCCATATCCT	TGACAGCACT	TGGTATAGCC	GATCCTTTAA ·	720
TTTTAGGCAC	TTTAAGGGGG	CAAATACCTG	GGATTTTAAA	GGTTTAACCT	TTTTATTTTC	780
CCAAATGGGT	TAATAGGTTC	TCAGCAACTT	TTCAAGGGGC	CTAATTCCCC	ССТТСААААТ	840
AACCTCCCCT	GG					852

(2) INFORMATION FOR SEQ ID NO:19:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1854 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

CCGGCACTCA	CCGCGGTGGC	GGCCGCTCTA	GAACTAGTGG	ATCCCCGGAA	ATGTTACTTC	60
CAACATTTTA	GAACTGAAAT	GATTCTTAGT	CTGGTGATAA	ATGTCAATTA	AAATAGTTCT	120
CCTTTCACAG	AGAAAATTAA	GAAAAAATTA	GTTCAAGAAA	ATATCAATCA	TGATTGCCAG	180
CGGAAATTTG	TTTCTGCAGT	AAAACAAGCA	AAACAAATCA	AATCCATTAA	AACTAGCAAC	240
AGACTGTCTT	CTAAAGTCAA	GTTCACATCT	GGAGATTTTT	ATAAACTTTA	TTGGAAAAGT	300
TCTGGTTATC	ТАТАТТТТТА	GCATAGCAAA	ATATTCTTCT	TGTTTGTTGA	ATTTGATATA	360
AAATGTTATT	TTTAGCCAAG	TCCTGGGGCA	ACTCCTACAT	GGCTGGAAAA	TGTTCTCGGT	420
GTTAACAAAG	ATGCAAAGAT	СТТАААТАТТ	AATGTTATCA	ATCAACTGGA	TACTCTTAAG	480
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TATTATTTGT	AATTATGTCC	AATGTCATCA	CCACAGGGCT	GACCAACAAG	CAAAGAGCTG	540
ACAGTAGTAG	CAAAATGTAG	AAATCTCTGG	TAAGCATGTT	GTGTTTATCA	ATCCTCTTCA	600
AATAGATGAA	ATTAAATTGC	ATTTAAAGAA	TGTTACTTAT	ATTAGGCATT	TTTTGTGAAA	660
GACGTTTTAA	ACTATGGTGT	CAGAAAACAG	АААТАСТААА	CAGAATGCAT	TTAACAGGAC	720
CTTGAAATCA	CTGAATACTC	ACCTGTGTAA	AAGTCAAAGT	TCAGATAATT	GAAATGTTCT	780
TACTAGTCTC	AAGATGTCTT	TTGGTTACAT	AGAAATTTCC	ATGCTGAATT	TTGATTTTTT	840
TAAAAAGCCA	TTAATATGAG	TCAAAATCCA	TTATTTCACA	AGTAAATGAC	СТТТТТАТТА	900
ааааааааа	AGAGAGAGAG	AGAAGAGCAA	GGAACCACCC	ACATCTAACC	ТСТТАААТСТ	960
GAGATCAATA	TATCAAAATT	TTAATGTACA	TTGAAAACAT	TTTCATTTTA	TTCCACACAC	1020
TACCTTTTCT	TCATAATTTC	TTATTCTGGA	CATATAGCAG	TTTTTTTTGT	СТТТТААААС	1080
AGGAAAAATA	AACAAACATG	GTCTTATTAT	TGTTACTAAG	TCACAGGTAG	TAAAGATGGG	1140
ACCAGGAGAA	CCTTGGAGGA	CTAGAAACTT	CTCAAGAGTA	GTTAGATTTC	ACATTCAGAG	1200
GGAGGACTCA	GAGTCCTGCC	TGGGACATAC	ATTTGCATTC	TAGGCTCAAG	AGCAAATATG	1260
TCAGCTTTCC	TTTGGTCAAA	CAATCTTTGC	TACAGGTCCT	AGGTAGTTAT	ATCAGTGGAA	1320
CCTACTAAAG	ATGATGGAAT	TTGTGGTATT	TCAGGGTAGG	AGGTAAAGTC	TTAGCAGGCT	1380
CAACTATACA	TGATCTTAAA	ACTAAATTTG	AAATGCAGAT	GTTCTATGAG	TTAGTTGGAT	1440
ATTGTAGTTA	TCCCATCTAT	CAACTGATCA	CATTTGGTAT	GAGCTTGTTA	GTTCTGATTA	1500
GGACTCATCT	CAACATAATA	AGAAGGGTGG	CATTTAGGGC	CCAGTGTGGG	GGCCTAGTGA	1560
TCACTGCTGG	GACACTGCTT	СТАААТСААС	ATAACTAACC	TCTCTAGGAT	GGCAGGCTGA	1620
GGCTGCTCAA	GTACTTCCTG	TCTGGCATCT	GGGACAGGGC	TGAGTCTCTG	GGTGGGAAGA	1680
TGGGTGGGAG	GACTGAGGCT	GATGAGTATA	TGATATAAAT	GAGAGCCATT	GGAATGGCTC	1740
CACATACAGG	ACATGTTGAT	AAATCATTTT	AACATATTTT	GCTTTCTCTC	TCTGGTGGCC	1800
CATTGAGAAT	CAAAAGGGGG	ATCCACTAGT	TCTAGAGCGG	CCGCCACCGC	GGTA	1854

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(2) INFORMATION FOR SEQ ID NO:20:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 1101 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

CCACCTTTTC	AATTCATCAT	ТТТТТТТТТА	TTCTTTTTT	TGATTTCGGT	TTCCTTGAAA	60
TTTTTTTGAT	TCGGTAATCT	CCGAACAGAA	GGAAGAACGA	AGGAAGGAGC	ACAGACTTAG	120
ATTGGTATAT	ATACGCATAT	GTAGTGTTGA	AGAAACATGA	AATTGCCCAG	TATTCTTAAC	180
CCAACTGCAC	AGAACAAAAA	CCTGCAGGAA	ACGAAGATAA	ATCATGTCGA	AAGCTACATA	240
TAAGGAACGT	GCTGCTACTC	ATCCTAGTCC	TGTTGCTGCC	AAGCTATTTA	ATATCATGCA	300
CGAAAAGCAA	ACAAACTTGT	GTGCTTCATT	GGATGTTCGT	ACCACCAAGG	AATTACTGGA	360
GTTAGTTGAA	GCATTAGGTC	CCAAAATTTG	TTTACTAAAA	ACACATGTGG	ATATCTTGAC	420
TGATTTTTCC	ATGGAGGGCA	CAGTTAAGCC	GCTAAAGGCA	TTATCCGCCA	AGTACAATTT	480
TTTACTCTTC	GAAGACAGAA	AATTTGCTGA	CATTGGTAAT	ACAGTCAAAT	TGCAGTACTC	540
TGCGGGTGTA	TACAGAATAG	CAGAATGGGC	AGACATTACG	AATGCACACG	GTGTGGTGGG	600
CCCAGGTATT	GTTAGCGGTT	TGAAGCAGGC	GGCAGAAGAA	GTAACAAAGG	AACCTAGAGG	660
CCTTTTGATG	TTAGCAGAAT	TGTCATGCAA	GGGCTCCCTA	TCTACTGGAG	ААТАТАСТАА	720
GGGTACTGTT	GACATTGCGA	AGAGCGACAA	AGATTTTGTT	ATCGGCTTTA	TTGCTCAAAG	780
AGACATGGGT	GGAAGAGATG	AAGGTTACGA	TTGGTTGATT	ATGACACCCG	GTGTGGGTTT	840
AGATGACAAG	GGAGACGCAT	TGGGTCAACA	GTATAGAACC	GTGGATGATG	TGGTCTCTAC	900
AGGATCTGAC	ATTATTATTG	TTGGAAGAGG	ACTATTTGCA	AAGGGAAGGG	ATGCTAAGGT	960
AGAGGGTGAA	CGTTACAGAA	AAGCAGGCTG	GGAAGCATAT	TTGAGAAGAT	GCGGCCAGCA	1020

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AAACTAAAAA ACTGTATTAT AAGTAAATGC ATGTATACTA AACTCACAAA TTAGAGCTTC	1080
AATTTAATTA TATCAGTTAT T	1101
 (2) INFORMATION FOR SEQ ID NO:21: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 120 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear 	
(ii) MOLECULE TYPE: DNA	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:	
AACTAATGTA TCCCCCGGGC TGCAGGAACA CGATATAAAG CCTTAAAATT GTGCGAATGT	60
GRTAAGTCGA TCCAATCTCA ACTGCTATCT RTGTACCAGA ATAGTTTCAT AATTACGTGT	120
(2) INFORMATION FOR SEQ ID NO:22: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 300 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:	
GAATTCTCTG WKATTAKAAC TATCTTGMCT CAAATTSACT TGGTGAGCTA ACCTGGCCTG	60
TGGTCCCTTG GCTTTAATGG AGGCTTTGTC ATATAGATCA TMTGTGGTAC TKGTGCCTAG	120
TTGTAGTGCC CTGCCTTGCT STTCTWGGCT TACTKGATTT WGGGGTATAC ATCWATKTAA	180
YTSAAAGGTC TTTCTCCTCC CGYYGGGAGA ATTTCTCCTC CTCCCTCGGA GAACTCTTTC	240
TSCCGAAATT CTATTCCGGG CTGGGTCTCC ATTCTGCTTA CCTCCCACAC TTTTAATMAA	300

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(2)	INFORMATION	FOR	SEQ	ID	NO:23	:
-----	-------------	-----	-----	----	-------	---

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 599 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

GAATTCCCTC TTGCTTGGGG GAGGTCAGCC TTTTGTTCTA TTCAAATCTT TGAGGAAAAT 60 AGAAAGCAAA GAATATATTA ACTATATTAA ACAAACTAAA TGTTCCAATT AAAATACAAA 120 AATTATAAAG CCTAATAATA AAAGCCCTCA ATTATATGCT GTTTAAAAGA GACATTTTTA 180 AGCTTAAGGA TATAGAAAAG TTGAAAATAA AAGAATGGAA TAAAATAAGC CATGAAAATA 240 CTAGTATAAC ACTGATGTCA AAATCTGACA AAGCACAA AAAAGAAAAT AACTTTAACT 300 GCAAAATCTT AAAATCCTAG CAAAGAAAAA GCAGCATATG TTATAATTAT ACCACAACCT 360 GATCAAGTAA GGCTTACTTC AAAAATTTAA CCATGGTCCA TTATTGGAAA ACATATTAAT 420 AAAAATCCTC ACAAAAATAA TTCAAAATAT AAAAAGCCAT ATGATAAGCC TGATGAATGC 480 TGGTTTACAG AACTGGTTTT CTTTAAAAAG GCAATCATTG GGGAAATAAC CCGCTTACTC 540 AGTATTTACT ATGTGCTAGC CCTGTTCCTT CTACTAGAAA TTAGTGAACA AATTCTAAC 599

- (2) INFORMATION FOR SEQ ID NO:24:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 330 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

AAGCTTTCAA GAACAGGGAC TGTTAAGCCG GGTACAGTGG CTCACACCTA TAATCCTAGC 60

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-	2.31	-

ATTTTGGGAG GCCAAGGCGG GTGGATCACT TGAGGTCAGG A	AGTTCAAGAC	CAGCCTGGCC	120
AACATGGTGA AACCCCATCT CTACTAAAAA AAAAAAAAAA	AAAAAAA	AAAGAAATWC	180
MAAAATTACC CAGGCATGGT GGCACGCGCC TGTAATCCCA K	CTACTTGGG	AGGCTGAGGC	240
AGGAAAATTG CTTGAACCTA GGAGGCGGAG GTGGCAGTGA C	CCTAATCACA	CCACTGTTCT	300
CCATCCTGGG CAACAGAACG AAACTGTTTC			330
(2) INFORMATION FOR SEQ ID NO:25:			
 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 258 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear 			
(ii) MOLECULE TYPE: DNA			
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:			
AAGCTTGGGT GATAATGAGG AGTCAATGTT GGTCCATCAA T	TTGCAACAAA	GGTACCACAG	60
TGGTGTAGGA TGTGGATAAT GAGGAGGCTG TGCACGTGTT G	GGGACAGGT	GGTATTTACG	120
AATGCTCTAT ATTTTCTTTC TCTCTTTTTT TAGGACGGAG T	PCTCACTCTG	TTGCCCACGC	180
TGGAATGCAY GGGCATGACT GTGGCTCACT GTACCCCCCA C	CTCCCCATGT	TCAAGAGATT	240
CTCTTGCCTC ACCTCCTG			258
(2) INFORMATION FOR SEQ ID NO:26:			
 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 622 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA			
(II) MODECODD IIID. DNA			

CTCGAGTCCA CCGCGGTGGC GGCCGCTCTA GAACTAGTGG ATCCCCCGAT TTATTTAAAG 60

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

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CAGTTATGTA	TGTATGAAAA	ACAATGCTGA	GCATTCAATT	CCAAGATTTC	TGAAGACACC	120
ТАТТТТАССА	TCACTTTGAA	TAAAATTTTT	ATATTCCTTT	CTTCAAATAC	CATCTCGGTT	180
TTCAAATGTG	GCTCATTAAA	TGTGAAAGCA	AAATTTCATT	TCAAATAGCA	GCCTTATCAA	240
ATGACAATTT	ACCTGTGGTA	GCATTGTTGG	CACTGACACA	TATCAGACCA	CTGCCGAGCA	300
GAACAAGAAT	GAACCAGGAA	TCCATGCTTA	TCTGGAAAAT	AGGGAGTCAT	GTTAGATGAG	360
GTCCTATATT	ATCAGGACTA	TGTCTGAGCT	GGTCACCAGA	AGAGTATTCT	GGATTTCCAA	420
GCTATTAAAA	TGTGTGCCTA	AACCAATGAT	CTTTTGGGAG	CCTGATATGC	ATGCTTCCTC	480
AGATATCCAA	TAACTAATTG	AGTCTTTATA	AAGACTGACT	ATCCCTTATC	TTGAGGACTA	540
GCAGTGTTTC	AGATTTTTTT	TAAGAGATAG	GGTCTTGCTC	TGTTGCCAGG	ATGGAGACAG	600
TGGTTATGAT	CATAGCTCAG	TG				622

(2) INFORMATION FOR SEQ ID NO:27:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 602 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:

TCGGACTCCA	CCGCGGTGGC	GGCCGCTCTA	GAACTAGTGG	ATCCCCCGGG	CCCTCAGGAC	60
TGCTGGGCTG	CCTGGTGTCA	GCACTTCCCG	CCATTTTCTA	TAGCACCAGT	АТТАТТСТТА	120
АТАСТТТААА	AAACCACCAG	GCACGGTGGC	TCACGCCTGG	AATCCCAGCA	CTTTGGGAGG	180
CCAAGGTGGG	CGGATCACAA	GGTCAGGAGA	TCAAGACCAT	CCTGGCTAAC	ACGGTGAAAC	240
CCTGTCTGTA	CTAAAAATAG	AAAAAATTA	GCTGGGCGTG	GTGGCATGCA	CCTGTAGTCC	300
CAGCTGCTGG	GGAGGCTGAG	GCAGGAGAAT	GGCGTGAACC	CGGGAGGCGG	ACTTGCAGTG	360
AGCCGAGATT	GCACCACTGC	ACTCCAGCCT	GGGTGACAGA	GCGAGACCCC	GTCTCAAAAA	420
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AAAAAAGTAA	АТААААТАА	AAAACCATAT	CCCACTATCT	CCCCCTTCTC	TCTTTGCCTG	480
TGACTANNNG	GCATACTTAT	GGGGAAATCT	TTAAGATGTC	AGATTTCAGT	TCTCTCACTT	540
TTCTACAACT	TCTCCCCATT	TTGCCTTTCT	TAGGAACTTC	CCTTCTTCCC	ATCTGATTCC	600
TN						602

(2) INFORMATION FOR SEQ ID NO:28:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 546 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

TATCAAGGCG GAGTCCACGG TGGCGGCCGC TCTAGAACTA GTGGATCCCC GAACCAGGAA 60 TCCATGCTTA TCTGGAAAAT AGGGAGTCAT GTTAGATGAG GTCCTATATT ATCAGGACTA 120 TGTCTGAGCT GGTCACCAGA AGAGTATTCT GGATTTCCAA GCTATTAAAA TGTGTGCCTA 180 AACCAATGAT CTTTTGGGAG CCTGATATGC ATGCTTCCTC AGATATCCAA TAACTAATTG 240 AGTCTTTATA AAGACTGACT ATCCCTTATC TTGAGGACTA GCAGTGTTTC AGATTTTTTT 300 TAAGAGATAG GGTCTTGCTC TGTTGCCCAG GATGGAGACA GTGGTTATGA TCATAGCTCA 360 GTGCAGCCTC TACCTCCTGG ACTCAAGTGA TCCTTCTGTC TCAGCCTCCT GAGTAGCTGG 420 GACTATAGGC ATGTACTACG ATGCCTGGCT AATTTTTAAA ATTTTCTGTA GAGACGGCGT 480 CTCACTATGT TGTCTAGGCT GCTCTCAAAC TCTTGGGTTC AACTGATCTC TTGCTTCAAC 540 TTCCAG 546

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(2) INFORMATION FOR SEQ ID NO:29:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 498 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

GTGGATTCAG ACGCGGTGGC GGCC	GCTCTA GAACTAGTGG	ATCCCCCGAG	CAGAGGTTGC	60
AGTGAGCCAA GATCGTGCTA CTGT	ACTCCA GCCTGGGCAA	CAGAGCAAGA	CTCCGTCTCA	120
AAAAAAAAA CAAACAAACG ATGT	GTGCCT GTGTTTCCTC	ATCTGTAGTA	TGAGGATAAT	180
GATCATATAT ATTTACTAGT GTTG	TTGGGA TGATCAAATT	AGGTATATTT	AATCATTGTG	240
TAAAAAAGTT GACGTGTAAA ATCC	ATGTAA AAAAGTTGGC	AGAAGAGACA	AACTGGTAAA	300
GCAGCCGTTC TTCATTTCTC ATTT	CATTCA ACAAGCATTA	TTAACAGCCT	AGCAAGAACA	360
CAGTATCCAG GAAAAATCAA AGAT	TATCAA GCTCATGTTC	TATAATCAAG	CAATTTATAA	420
ACTAGCAGAA GAACAAGACA GATG	BAATAAG AACTTGGGTA	TATTTAAATG	CTAAGAAGTT	480
CAATTCAAAT AAATGTCC				498

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CLAIMS:

- 1. An isolated nucleic acid molecule comprising a sequence of nucleotides derived from a eukaryotic chromosome and encompassing a neocentromere or a functional derivative synthetic or hybrid form thereof which nucleic acid molecule or its derivatives, synthetic forms or hybrid forms when introduced into a compatible cell is capable of replicating, acting as an extrachromosomal element and segregating with cell division.
- 2. An isolated nucleic acid molecule according to claim 1 wherein the eukaryotic chromosome is a mammalian chromosome.
- 3. An isolated nucleic acid molecule according to claim 3 wherein the chromosome is a human chromosome.
- An isolated nucleic acid molecule according to claim 2 wherein the nucleic acid molecule 4. is capable of associating with centromeric binding proteins (CENP)-A and -C or antibodies thereto.
- 5. An isolated nucleic acid molecule according to claim 4 wherein the chromosome is human chromosome 10 or a modified form of human chromosome 10 or its non-human mammalian or non-mammalian equivalent.
- An isolated nucleic acid molecule according to claim 5 wherein the nucleotide sequence 6. corresponds to a region mapping between q24 and q26 on chromosome 10.
- 7. An isolated nucleic acid molecule according to claim 5 wherein a modified form of human chromosome 10 is a mardel (10) chromosome.
- 8. An isolated nucleic acid molecule according to claim 6 comprising a nucleotide sequence substantially as set forth in SEQ ID NO: 3 or a nucleotide sequence having at least 40% similarity thereto or a nucleotide sequence capable of hybridising to SEQ ID NO: 3 under low

stringency conditions at 42°C.

- 9. An isolated nucleic acid molecule according to claim 7 comprising a nucleotide sequence substantially as set forth in SEQ ID NO: 4 or a nucleotide sequence having at least 40% similarity thereto or a nucleotide sequence capable of hybridising to SEQ ID NO: 4 under low stringency conditions at 42°C.
- 10. An isolated nucleic acid molecule according to claim 7 comprising a nucleotide sequence substantially as set forth in one or more of SEQ ID NOs: 5-29 or a nucleotide sequence having at least 40% similarity thereto or a nucleotide sequence capable of hybridising to one or more of SEQ ID NOs: 5-29 under low stringency conditions at 42°C.
- 11. An isolated nucleic acid molecule according to claim 1 wherein the length of the nucleic acid molecule is from about 50 bp to about 1500 kbp.
- 12. An isolated nucleic acid molecule according to claim 11 wherein the length of the nucleic acid molecule is from about 1 kbp to about 1000 kbp.
- 13. An isolated nucleic acid molecule according to claim 12 wherein the length of the nucleic acid molecule is from about 10 kbp to about 500 kbp.
- 14. An isolated nucleic acid molecule according to claim 13 wherein the length of the nucleic acid molecule is from about 10 kbp to about 100 kbp.
- 15. An isolated nucleic acid molecule comprising a nucleotide sequence encompassing a neocentromere or a functional derivative, synthetic or hybrid form thereof which when said nucleic acid molecule is in linear form and co-introduced into a cell together with a telomeric sequence, is capable of replicating, remaining as an extra-chromosomal element and segregates with cell division.

- 16. An isolated nucleic acid molecule according to claim 15 wherein the nucleotide sequence is derived from a mammalian chromosome.
- 17. An isolated nucleic acid molecule according to claim 16 wherein said nucleic acid molecule is capable of associating with CENP-A and CENP-C antibodies.
- 18. An isolated nucleic acid molecule according to claim 16 or 17 wherein the mammalian chromosome is human chromosome 10 or a modified form of chromosome 10 or its non-human mammalian or non-mammalian equivalent.
- 19. An isolated nucleic acid molecule according to claim 18 wherein the nucleotide sequence corresponds to a region mapping between q24 and q26 on chromosome 10.
- An isolated nucleic acid molecule according to claim 18 wherein the modified form of 20. human chromosome 10 is mardel (10) chromosome.
- 21. An isolated nucleic acid molecule according to claim 18 comprising a nucleotide sequence substantially as set forth in SEQ ID NO: 3 or a nucleotide sequence having at least 40% similarity thereto or a nucleotide sequence capable of hybridising to SEQ ID NO: 3 under low stringency conditions at 42°C.
- 22. An isolated nucleic acid molecule according to claim 19 comprising a nucleotide sequence substantially as set forth in SEQ ID NO: 4 or a nucleotide sequence having at least 40% similarity thereto or a nucleotide sequence capable of hybridising to SEQ ID NO: 4 under low stringency conditions at 42°C.
- An isolated nucleic acid molecule according to claim 19 comprising a nucleotide 23. sequence substantially as set forth in one or more of SEQ ID Nos: 5-29 or a nucleotide sequence having at least 40% similarity thereto or a nucleotide sequence capable of hybridising to one or more of SEQ ID Nos: 5-29 under low stringency conditions at 42°C.

- 24. An isolated nucleic acid molecule according to claim 15 wherein the length of the nucleic acid molecule is from about 50 bp to about 1500 kbp.
- 25. An isolated nucleic acid molecule according to claim 24 wherein the length of the nucleic acid molecule is from about 1 kbp to about 1000 kbp.
- 26. An isolated nucleic acid molecule according to claim 25 wherein the length of the nucleic acid molecule is from about 10 kbp to about 500 kbp.
- 27. An isolated nucleic acid molecule according to claim 26 wherein the length of the nucleic acid molecule is from about 10 kbp to about 100 kbp.
- 28. An isolated nucleic acid molecule or its chemical equivalent encompassing a human neocentromere or a functional derivative thereof or a latent, synthetic, hybrid or its mammalian or non-mammalian homologue.
- An isolated nucleic acid molecule according to claim 28 wherein said nucleic acid 29. molecule when introduced into a compatible cell is a replicating, extra-chromosomal element which segregates with cell division.
- 30. An isolated nucleic acid molecule according to claim 29 wherein the nucleic acid molecule is capable of associating with centromeric binding proteins (CENP)-A and -C or antibodies thereto.
- An isolated nucleic acid molecule according to claim 29 or 30 wherein the chromosome 31. is human chromosome 10 or a modified form of human chromosome 10 or its non-human mammalian or non-mammalian equivalent.
- 32. An isolated nucleic acid molecule according to claim 31 wherein the nucleotide sequence corresponds to a region mapping between q24 and q26 on chromosome 10.

- 33. An isolated nucleic acid molecule according to claim 31 wherein a modified form of human chromosome 10 is a mardel (10) chromosome.
- 34. An isolated nucleic acid molecule according to claim 31 comprising a nucleotide sequence substantially as set forth in SEQ ID NO: 3 or a nucleotide sequence having at least 40% similarity thereto or a nucleotide sequence capable of hybridising to SEQ ID NO: 3 under low stringency conditions at 42°C.
- 35. An isolated nucleic acid molecule according to claim 32 comprising a nucleotide sequence substantially as set forth in SEQ ID NO: 4 or a nucleotide sequence having at least 40% similarity thereto or a nucleotide sequence capable of hybridising to SEO ID NO: 4 under low stringency conditions at 42°C.
- 36. An isolated nucleic acid molecule according to claim 32 comprising a nucleotide sequence substantially as set forth in one or more of SEQ ID Nos: 5-29 or a nucleotide sequence having at least 40% similarity thereto or a nucleotide sequence capable of hybridising to one or more of SEQ ID Nos: 5-29 under low stringency conditions at 42°C.
- 37. An isolated nucleic acid molecule according to claim 28 wherein the length of the nucleic acid molecule is from about 50 bp to about 1500 kbp.
- 38. An isolated nucleic acid molecule according to claim 37 wherein the length of the nucleic acid molecule is from about 1 kbp to about 1000 kbp.
- 39. An isolated nucleic acid molecule according to claim 38 wherein the length of the nucleic acid molecule is from about 10 kbp to about 500 kbp.
- A genetic construct comprising an origin of replication for a eukaryotic cell and a nucleic 40. acid molecule encompassing a eukaryotic neocentromere or a functional derivative thereof or a latent, synthetic, hybrid form thereof or its mammalian or non-mammalian homologue flanked by telomeric nucleotide sequences functional in the cell in which the genetic construct is to

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replicate and wherein said genetic construct when introduced into a cell is a replicating, extrachromosomal element which segregates with cell division.

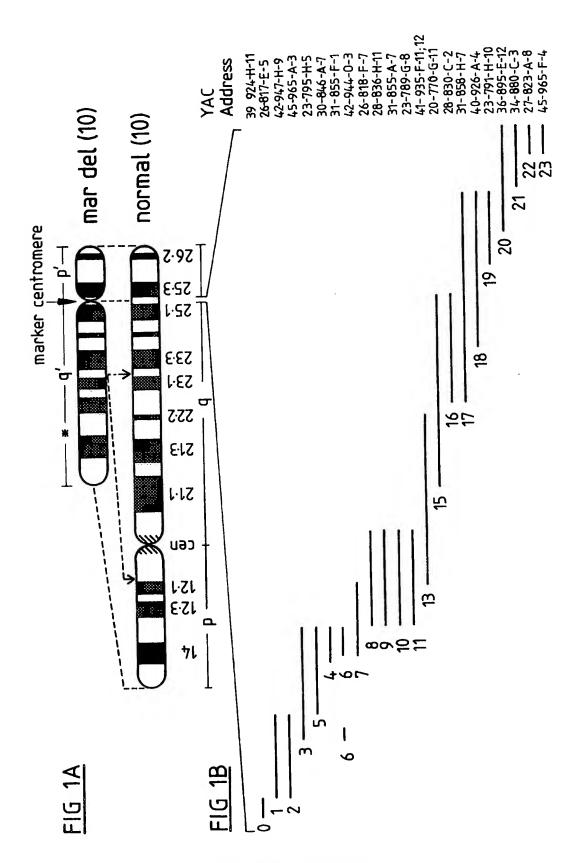
- 41. A genetic construct according to claim 40 wherein the eukaryotic neocentromere is a mammalian centromere.
- 42. An isolated nucleic acid molecule according to claim 41 wherein the neocentromere is a human neocentromere.
- 43. An isolated nucleic acid molecule according to claim 42 wherein the nucleic acid molecule is capable of associating with CENP-A and -C or antibodies thereto.
- 44. An isolated nucleic acid molecule according to claim 43 wherein the neocentromere is from human chromosome 10 or a modified form of human chromosome 10 or its non-human mammalian or non-mammalian equivalent.
- 45. An isolated nucleic acid molecule according to claim 44 wherein the human neocentromere maps to a region between q24 and q26 on chromosome 10.
- 46. An isolated nucleic acid molecule according to claim 44 wherein a modified form of human chromosome 10 is a mardel (10) chromosome.
- An isolated nucleic acid molecule according to claim 45 comprising a nucleotide 47. sequence substantially as set forth in SEQ ID NO: 3 or a nucleotide sequence having at least 40% similarity thereto or a nucleotide sequence capable of hybridising to SEQ ID NO: 3 under low stringency conditions at 42°C.
- An isolated nucleic acid molecule according to claim 46 comprising a nucleotide 48. sequence substantially as set forth in SEQ ID NO: 4 or a nucleotide sequence having at least 40% similarity thereto or a nucleotide sequence capable of hybridising to SEQ ID NO: 4 under low stringency conditions at 42°C.

- 49. An isolated nucleic acid molecule according to claim 46 comprising a nucleotide sequence substantially as set forth in one or more of SEQ ID Nos: 5-29 or a nucleotide sequence having at least 40% similarity thereto or a nucleotide sequence capable of hybridising to one or more of SEQ ID Nos: 5-29 under low stringency conditions at 42°C.
- 50. An artificial chromosome for use in gene therapy said artificial chromosome comprising a nucleic acid molecule capable of conferring a phenotypic property on a cell carrying said artificial chromosome wherein said artificial chromosome is a replicating element which segregates with cell division.
- 51. An artificial chromosome according to claim 50 wherein said artificial chromosome is capable of functioning in a mammalian cell.
- 52. An artificial chromosome according to claim 51 wherein said artificial chromosome is capable of functioning in a human cell.
- 53. An artificial chromosome according to claim 52 wherein the chromosome is a human chromosome.
- 54. An artificial chromosome according to claim 53 wherein the chromosome is capable of associating with CENP-A and -C or antibodies thereto.
- 55. An artificial chromosome according to claim 53 or 54 wherein the chromosome is human chromosome 10 or a modified form of human chromosome 10 or its non-human mammalian or non-mammalian equivalent.
- 56. An artificial chromosome according to claim 55 comprising a region mapping between q24 and q26 on chromosome 10.
- 57. An artificial chromosome according to claim 5 wherein a modified form of human chromosome 10 is a mardel (10) chromosome.

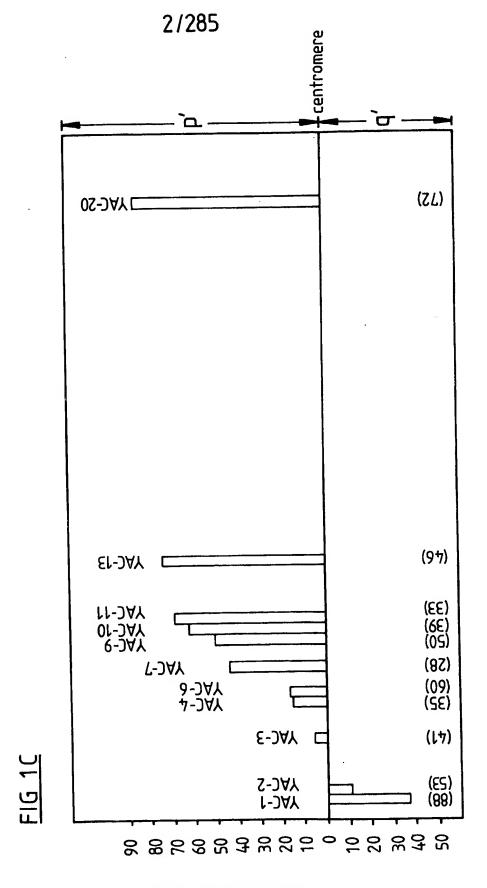
- 58. An artificial chromosome according to claim 56 comprising a nucleotide sequence substantially as set forth in SEQ ID NO: 3 or a nucleotide sequence having at least 40% similarity thereto or a nucleotide sequence capable of hybridising to SEQ ID NO: 3 under low stringency conditions at 42°C.
- 59. An artificial chromosome according to claim 57 comprising a nucleotide sequence substantially as set forth in SEQ ID NO: 4 or a nucleotide sequence having at least 40% similarity thereto or a nucleotide sequence capable of hybridising to SEQ ID NO: 4 under low stringency conditions at 42°C.
- 60. An artificial chromosome according to claim 57 comprising a nucleotide sequence substantially as set forth in one or more of SEQ ID Nos: 5-29 or a nucleotide sequence having at least 40% similarity thereto or a nucleotide sequence capable of hybridising to one or more of SEQ ID Nos: 5-29 under low stringency conditions at 42°C.
- 61. An isolated nucleic acid molecule comprising a sequence of nucleotides which defines a eukaryotic neocentromere.
- 62. An isolated nucleic acid molecule according to claim 61 wherein the neocentromere is derived from a mammalian chromosome.
- 63. An isolated nucleic acid molecule according to claim 61 wherein the neocentromere is derived from a human chromosome.
- 64. An isolated nucleic acid molecule according to claim 63 wherein the nucleic acid molecule is capable of associating with centromeric binding proteins (CENP)-A and -C or antibodies thereto.
- 65. An isolated acid molecule according to claim 63 or 64 wherein the chromosome is human chromosome 10 or a modified form of human chromosome 10 or its non-human mammalian or non-mammalian equivalent.

- 66. An isolated nucleic acid molecule according to claim 65 wherein the nucleotide sequence corresponds to a region mapping between q24 and q26 on chromosome 10.
- 67. An isolated nucleic acid molecule according to claim 65 wherein a modified form of human chromosome 10 is a mardel (10) chromosome.
- 68. An isolated nucleic acid molecule according to claim 66 comprising a nucleotide sequence substantially as set forth in SEQ ID NO: 3 or a nucleotide sequence having at least 40% similarity thereto or a nucleotide sequence capable of hybridising to SEQ ID NO: 3 under low stringency conditions at 42°C.
- 69. An isolated nucleic acid molecule according to claim 67 comprising a nucleotide sequence substantially as set forth in SEQ ID NO: 4 or a nucleotide sequence having at least 40% similarity thereto or a nucleotide sequence capable of hybridising to SEQ ID NO: 4 under low stringency conditions at 42°C.
- 70. An isolated nucleic acid molecule according to claim 67 comprising a nucleotide sequence substantially as set forth in one or more of SEQ ID NOs: 5-29 or a nucleotide sequence having at least 40% similarity thereto or a nucleotide sequence capable of hybridising to one or more of SEQ ID NOs: 5-29 under low stringency conditions at 42°C.
- 71. An isolated nucleic acid molecule according to claim 61 wherein the length of the nucleic acid molecule is from about 50 bp to about 1500 kbp.
- 72. An isolated nucleic acid molecule according to claim 71 wherein the length of the nucleic acid molecule is from about 1 kbp to about 1000 kbp.
- 73. An isolated nucleic acid molecule according to claim 72 wherein the length of the nucleic acid molecule is from about 10 kbp to about 500 kbp.

74. An isolated nucleic acid molecule according to claim 73 wherein the length of the nucleic acid molecule is from about 10 kbp to about 100 kbp.



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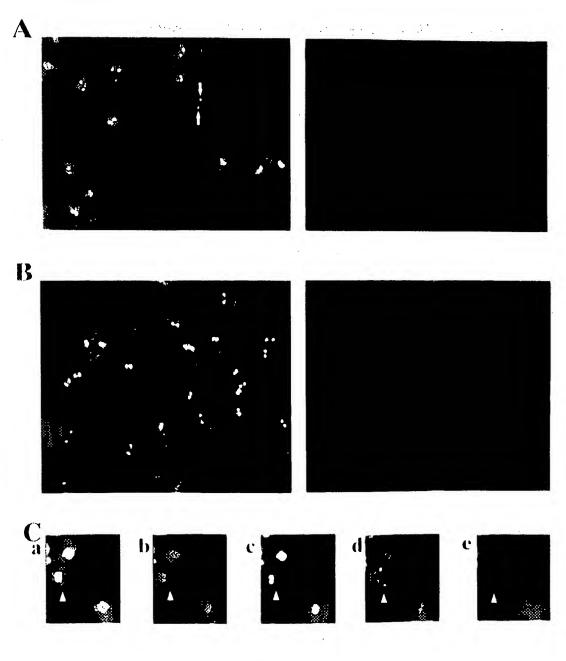


FIG 2

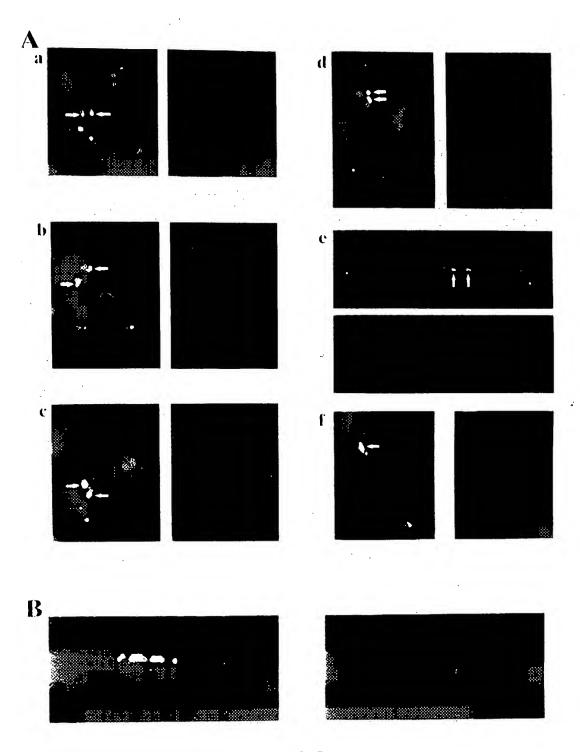
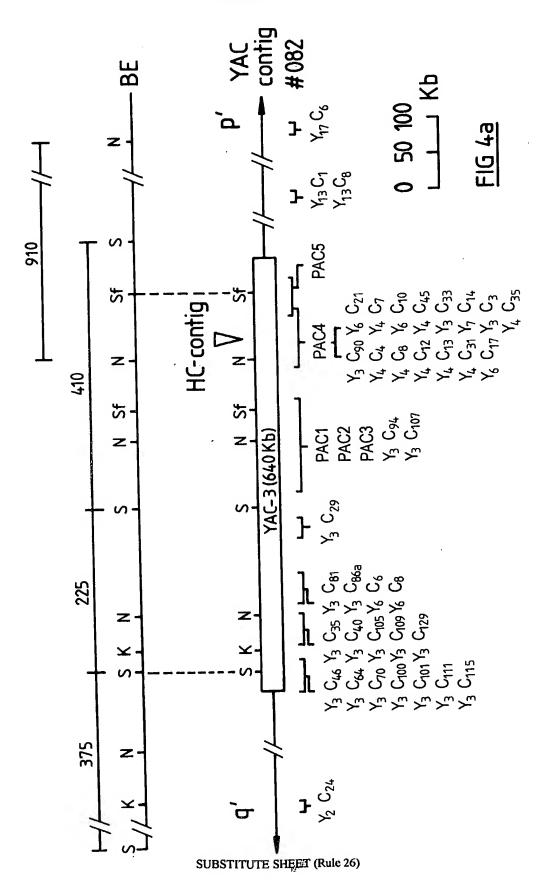


FIG 3

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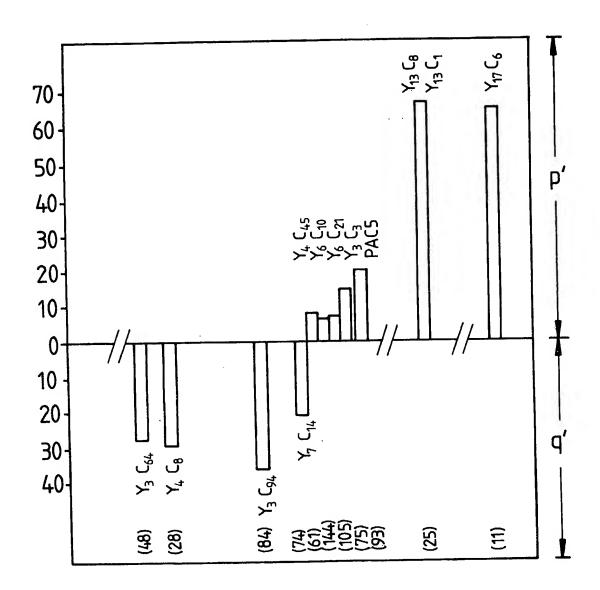
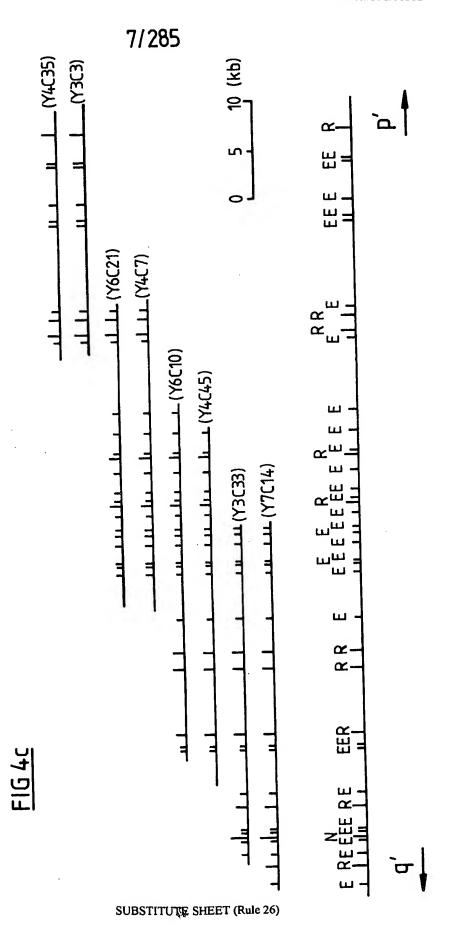
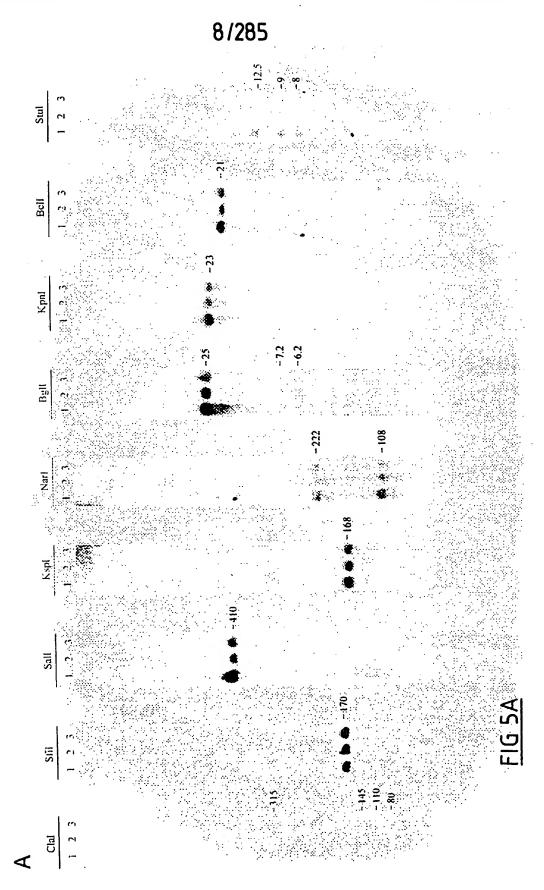


FIG 4b

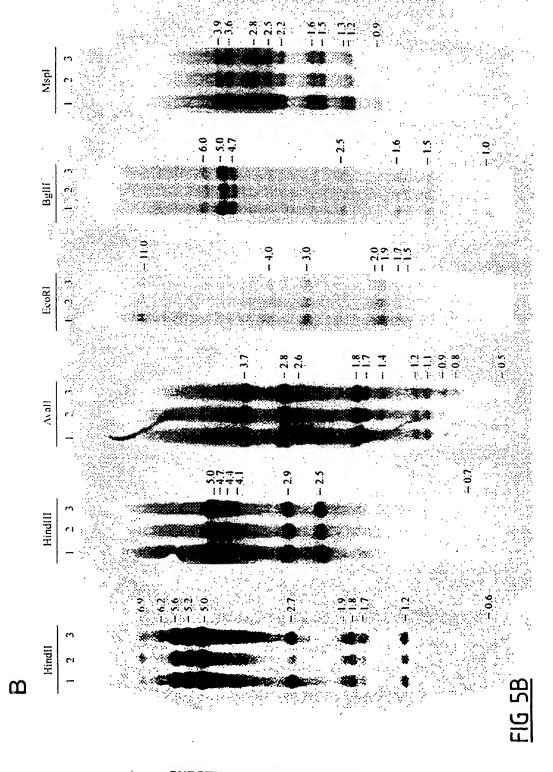
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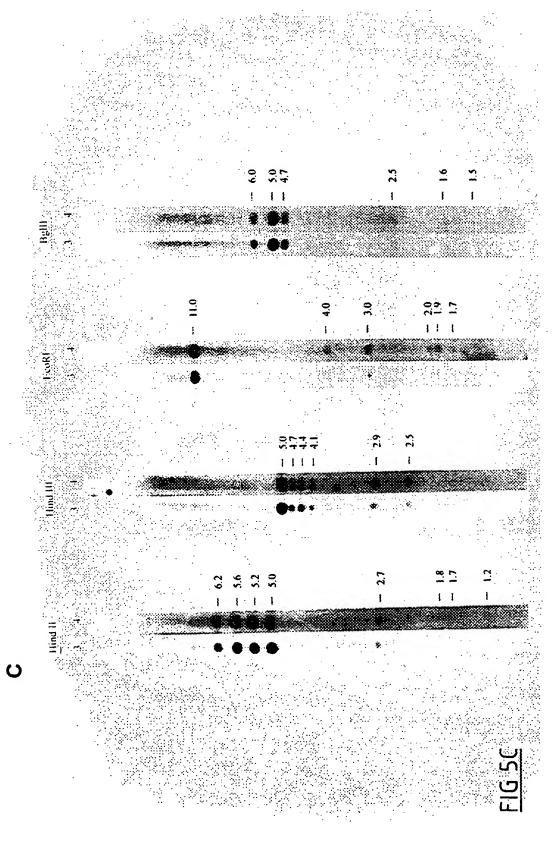
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	FIGURE 6 (1)					
	GAATTCTCCT	GAATTCTCCT GCCTCAGCCT	CCCAAGTAGC	CCCAAGTAGC TGAGGTTACA GGTGCCAGCC ACCACGTCCA	GGTGCCAGCC	ACCACGTCCA
	GCTAATTTTT	GTATTTTAGT	AGAGGGGG	TTTCACCGTG	TTTGCCAGGC	TGGTATCAAA
	CTCCTGACCT	CTCCTGACCT CAAGTGATCT GCCTGCCTCA GCCTCCCAAA ATGCTAGGAT	GCCTGCCTCA	GCCTCCCAAA	ATGCTAGGAT	TACAGGTGTG
A	AGTCACCGCA	AGTCACCGCA CCCAGCCCTT CTTTCAGTTC TATCACCTCT	CTTTCAGTTC	татсасстст	TTTTGCTATA TTTGTATGAG	TTTGTATGAG
	AGCTTTATTA	AGCTTTATTA TTAGGGGCAC	ATACATTTAA AATTGTTATG	AATTGTTATG	TCTTATTGAT	AGATTGATCT
	GTCATTATGA	GTCATTATGA ATGTCTGTAT	TCATTCCCTG	ATAGTATTTC	TTTTTCTAAA	TATTTTCTG
(D.J. 00)	AATGTGTCTG	AATGTGTCTG CTATTAACAT AGCCACTCTG GCTTTTTAAA ATTAGTATTT	AGCCACTCTG	GCTTTTTAAA	ATTAGTATTT	TTATGGTATA
	TATTTTCCT	TATTTTCCT TTTTTTTT	TTTAAGTTTT	AGATGTTATG	TTTCCTTATA CTTAAAGTGG	CTTAAAGTGG
	GTGTCTTATA	GTGTCTTATA GGCAGCATAT	ATCTGGGTCT	TGATGTATTA	TTTAATCTGA	TAATCTCAAC
	CTTTTTGTTG	CTTTTTGTTG GAGTGTTTAG GCCATTTACA TTTAGTGTAA TTATAGACAT GGTTTGATTT	GCCATTTACA	TTTAGTGTAA	TTATAGACAT	GGTTTGATTT
	GCTATACCAT	CTTTTCATTT	GTTTTATATG TGAGCCATCT		TTTCATTGTT	CTTTTTTCAT

CTATTGGCTT	ATATACATCT	ATGTAGAAAC	ATAATACATT	AACATTTTCT	TCCATACCAC	ACAAGTCTTT	TAAGTGTGCA	ACTAAAAAAT	AGGTCTTTTC	CAGTTTCTTA
TTCATTATAT	TGTTTTATGT AGGATTTATA ATATACATCT	ATTTTACCAG CTCAAGTGTA ATGTAGAAAC	CTAATTTTA TGCTATGTCT ATAATACATT	GCTGTTGGCT GGGGTCAGCA AACATTTTCT	TGGGTTTGGT	CACAATAATA CAAATATGCA AGAAGTGGAT ATCACAATAA AGTGAGTCAC ACAAGTCTTT		ATAGTGTTAT GTCTAAAAA ACACATACCT TAATTTTAAA ATGCTTTATT ACTAAAAAT	TCAGTGAGTT GTAATCTTTT TGCTGGTGGA AGGTCTTTTC	TTATTGATGA CTGATCGGGG GTCAGGTGCT GAAGCTTAGG GTGGCTGTGG CAGTTTCTTA
TTTTTTGTAT	TGTTTTATGT	ATTTACCAG	СТААТТТТТА	GCTGTTGGCT	GGAGATACTG	ATCACAATAA	TATACTACAC	TAATTTTAAA	GTAATCTTTT	GAAGCTTAGG
ACTGAATACT	TTTTTTTC	TTCAAATAGT	TTTCTGTCTC	TTACCTTATT		AGAAGTGGAT	AAGTTTTGCT	ACACATACCT	TCAGTGAGTT	GTCAGGTGCT
CTTTGACCAT TTTCTTTAGT	TTTAGTTATA CCTCTTAAAA TTTTTTTTC	TTAACTTATC ACAGATTACC	CTTACAAGAG TATATTTTCA	AGGTTTGTTG TTGTTTT	GTAAAGGGCT AGATAGTACA GGCATACCTT	CAAATATGCA	TGGCTTCCCA GTGCATATAA AAGTTTTGCT TATACTACAC TGTAGTCTGT	GTCTAAAAAA	GCTAACAATC ATTTGAGCAT	CTGATCGGGG
CTTTGACCAT	TTTAGTTATA	TTAACTTATC	CTTACAAGAG	AGGTTTGTTG	GTAAAGGGCT	CACAATAATA	TGGCTTCCCA	ATAGTGTTAT	GCTAACAATC	TTATTGATGA

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FIGURE 6 (2)

AACAGT	GAAGATTGCA	AAACAACAGT GAAGATTGCA ATATCAGTTG ACTCTTCCTT		TCATGAAAGA TTTCTCTCTA	TTTCTCTCTA
ĪĞ	CTTTTTGATA	GTGTGTGATG CTTTTTGATA GCATTTTATG CACAGTAGAA CTTCTTTGAA AATTGGATCA	CACAGTAGAA	CTTCTTTGAA	AATTGGATCA
¥.	ATCCTCTCAA ACCCTGCTCT		GCTTTAACAA CCTAAGTTAA TATAATATTC		TGAATCCATT
ŢŢ	GTTGTCATTT CAACAATTTT	CACAGTGTCT	TCACCAGGAG TAGATTCCAT	табаттссат	CTCATTTCCT
GAGATGGAAT	CTTTGCTCAT		CCATAAGAAG AAATTCCTCA TCTGTTCAAG TTTTATCATG	TCTGTTCAAG	TTTTATCATG
$\mathcal{C}_{\mathcal{C}}$	AGATTGCAGC AATACAGTCA	TGTCTTCAGG	TGTCTTCAGG CCTCACTTCA CTTTTAATTC		CAGTTCTCTT
TA	CCACATCTGT	GCTGTTTCTA CCACATCTGT GGTTCCTTCC TCCATTGAAG TCTTGAACCT CTCCAAGTCA	TCCATTGAAG	TCTTGAACCT	CTCCAAGTCA
GG	TCCATGAGGG TTGGAATCGA	CTTCTTCCAA ATTCCTGTTA ATATTTATAT	ATTCCTGTTA	АТАТТТАТАТ	TTTGACCTCC
AT	CATGAATCAT GAATGTTCTT		AATGGCACCT GGAATGGTGA ATCCTTTCCA AAAGGTTTTC	ATCCTTTCCA	AAAGGTTTTC
ľA	GTCCAGATCC	AATTTACTTA GTCCAGATCC ATCCATCCAG AGGATCCACT TTCAATGCCA GTTATAGCCT	AGGATCCACT	TTCAATGCCA	GTTATAGCCT
TATGGAATGT	ATTTCTTCAA	ATTTCTTCAA TAATAAGGCT TGAAAGTTGA AATTACTCCT TGATCCATTT	TGAAAGTTGA	AATTACTCCT	TGATCCATTT

FIGURE 6 (4)

TTGTACATGT	TTGAAAGGAA	ACCATTCTGT	GCAGAGTAGA	TTGGCATCAA	TGAAGCTTTG	CTTCTTCCAA	TTCATCAATG	GCTACTTCAC	AACCTCTGCT	ACTTGAGGAT
TTAGCAGGCA TGAAAGCAAC ATTAATCTTT TTGTACATGT	CCATCAGAGC TCTTGGGTGA CCAGGTATAT TGCCAGTGAG CAGTAATACT TTGAAAGGAA	TATTTGGTCC	AAACTGATGT GCTGTCATCT AAACTTTGTA GTTTCATTTA TAGAGCACAG GCAGAGTAGA	TAAATGAACA TTGGCATCAA	TTTAAATCAC TAGCTGTATT AGCCCCCAAC AAGAGAGTCA GCCTATTTTT TGAAGCTTTG	CTTCTC CTCCCTGGTT ACAAAGTCC TAAATGGCAT CTTCTTCCAA	TTTTATCTAC ATTGAAAATC TGTTGTTTAG TGTAGCCACC TTCATCAATG	ATACTATCTA GATCTCTTGG ATAACTTGTG CAGCTTCTAC ATCAGCATTT GCTACTTCAC	TICCICGIAC CICAIGAACC AACCICIGCI	AGCTTCCAAC TTTTCTTCTG TAGTTTCCTC GCCTCTCTCA GCCTTCATAG ACTTGAGGAT
TGAAAGCAAC	TGCCAGTGAG	TTATTTTTCT TAGCAGTAGG TCTCAACAAT GGGCTTAAAA TATTTGGTCC	GTTTCATTTA	TTCAGAATGG	AAGAGAGTCA	ACAAAAGTCC	TGTTGTTTAG	CAGCTTCTAC	TTCCTCGTAC	GCCTCTCTCA
TTAGCAGGCA	CCAGGTATAT	TCTCAACAAT	AAACTTTGTA	ACTTAGGATT	AGCCCCCAAC	CTCCCTGGTT	ATTGAAAATC	ATAACTTGTG	AGTGGCATCT	TAGTTTCCTC
TCTGCAAAAT AGATGTTGTG	TCTTGGGTGA	TAGCAGTAGG	GCTGTCATCT	TGTAGCATAA TTCTTAAGGG ACTTAGGATT	ТАССТСТАТТ	TCGACTTCTC	ТТТТАТСТАС	GATCTCTTGG	CTTGTACTCT TATGTAATGG AGTGGCATCT	TTTTCTTCTG
TCTGCAAAAT	CCATCAGAGC	TTATTTTCT	AAACTGATGT	TGTAGCATAA	TTTAAATCAC	AAGCCAAGCG TCGA	TATAAGGCTG	ATACTATCTA	CTTGTACTCT	AGCTTCCAAC

FIGURE 6 (5)					
AGTTAGAGAC	TTGCTTTGGA		TTAGATTTTG GCTTCAGGAA ATGTTGTGGC	ATGTTGTGGC	TGGTTTGATC
TTCTATCCAG ACCA	ACCACTAAAA	CTTTATCCAT	ATCAGCAATA	AGGCTGTTTT	GCTTTCTTAT
TATTTGTGTG TTCA	TTCACTGGAG	CTGGAG TAGCACTTTT	AATTTGCTTC AAGATATATT	ААСАТАТАТТ	TCTTTGCATT
CACAACTTGG CTGA	CTGACTGGTG		CAAGAGGCCT AGCTTTCAGA CTATCTTGGC		TTTTGACATG
CCTTCCTCAC TAAG	TAAGCTTAAT	CATTTCTAGC	TTTTGATTTA	TTTTGATTTA AAATGAGAGA TGTAGGCCAG	TGTAGGCCAG
GCACAGTGGC	GCACAGTGGC AGGCACAGTG	GCATATGCCT	GTAATTCCAA	GTAATTCCAA CACATTAAGA GGCCAAGGTG	GGCCAAGGTG
GGAGGATTGC	GGAGGATTGC TTGAACCCAG GAGGTGGAGG	GAGGTGGAGG	TTGTAGAGAT	CACACCACTG	CATTCCGTCC
TGGATGACAG	TGGATGACAG AGCAAGACCT	TTCTCAAAAT	TTCTCAAAAT AAAATGAGAG	GTGTGCTTCT	TCTTTTTGTT
TGAGCCCATA	TGAGCCCATA GAAGCCATAG	ТАТСАТТТТТ	AATTGGCCTA ATTTCAATAC	ATTTCAATAC	TGTTGTGTCT
CAGAGAATAG	GGAGGTCTGA	CAGAGAATAG GGAGGTCTGA AGAGGGGAG AGAGGTGGGG GAATGGCTGG	AGAGGTGGGG	GAATGGCTGG	TCAGTGGAGC
AGTCAGAACA	AGTCAGAACA CACATAACAC	TAATAAATTG	TTTGCTGTCT	TATATGGATG	TGGTTTGTGA

FIGURE 6 (6)					
TGCCCCCAAA	CAATTACAAT	TGCCCCCAAA CAATTACAAT AGTTACAGCA AATATCACTG ATCACAGATC ACCATAACAG	AATATCACTG	ATCACAGATC	ACCATAACAG
ATATAAGAAT	ATATAAGAAT CATGGCAAAG	TTTGAAATAT	TCTTGAGAAT	TAGCAAAGTG TGACACAGAG	TGACACAGAG
AAACAAAGTG	AGCACATGCC	AAACAAAGTG AGCACATGCC GTTGGAAAAA ATTGGTGTTG ATAGACTTGC TCCATCGCAA	ATTGGTGTTG	ATAGACTTGC	TCCATCGCAA
GTTTGCCATA	CGCCTTCAAT	GTTTGCCATA CGCCTTCAAT TTATAAAAA CACAATATCT AGGAAGTTCA ATAAAGTGAA	САСААТАТСТ	AGGAAGTTCA	ATAAAGTGAA
GTGCAATAAG	GTGCAATAAG ATGAAGTATG	CCTGTAAATA	CCTGTAAATA TTTCAGGCTT	TCCAGACCAT AGGGTTTCTG	AGGGTTTCTG
TTGCAACTGC	TTGCAACTGC TCACCTCTGC	CATTATAGCA TGAAAGCAGC		TATAGAAAAT ATACATAAAT	ATACATAAAT
GAGGCCTGTA	GAGGCCTGTA ATCCCAACAC	TTTGGGAGCC	TTTGGGAGCC CAAGGTGGAT GGATCACTTG AGGTCAGGAA	GGATCACTTG	AGGTCAGGAA
TTCGAGACCA	GCTTGGCCAA	TTCGAGACCA GCTTGGCCAA CATGGCAAAA CCCCGTCTCT ACTAAAATA CAAAAATGAG	CCCCGTCTCT	ACTAAAAATA	CAAAAATGAG
CCAGGACTAC	CCAGGACTAC GCATGCCTGT	AGTCCCAGCT	ACTTGGGAGG	CTGAGGCAGG AGAATCTCTT	AGAATCTCTT
GAACCCGGGA	AGGGGAGGTT	GAACCCGGGA AGGGGAGGTT ACAGTGAGCC AAGATTGTGC CACTGCACTC CAGCCTGGGC	AAGATTGTGC	CACTGCACTC	CAGCCTGGGC
AACAGAGTGA	GACTGTCTCA	AACAGAGTGA GACTGTCTCA CAAAAAAAA AAAAGGAAAA GAAAATACAC ATAAATGAAT	AAAAGGAAAA	GAAAATACAC	ATAAATGAAT

FIGURE 6 (7)					
GTATGTGGCT		GTGTACCAGT ATATCCTCAT GCTCTAGCTT GCCAACCCTT GCTTTACACT	GCTCTAGCTT	GCCAACCCTT	GCTTTACACT
GTCAGTTACC	TTCTAAAGAG	TTCTAAAGAG ATTAAAAATC ATAACAATAT CTATTACGTT	ATAACAATAT	CTATTACGTT	TATTCACATC
CTAGTGTCAT	TTCTTCCTTA	TGTAGAATCA	TGTAGAATCA AATTTCATTC TGGTATCATA TTTCTTTTT	тсстатсята	TTTCTTCTTT
CTAAATAATT	СТАААТААТТ ТССТТТААТА		TTTTTTATAG CACAGGTCTA ATAGCAATGC	ATAGCAATGC	ATTATGCAAT
TCATTGCTAT	TAGACCTGTG	TCATTGCTAT TAGACCTGTG CTATAAATA GCAATGAATT ATGTCAGTTT	GCAATGAATT	ATGTCAGTTT	TTATTTGTCT
GAAAAAGTTT	TTTGTTTTG	AAATATACTT	AAATATACTT TTGCTGGGTA TATAAATCCA TGTTGCATAA	TATAAATCCA	TGTTGCATAA
CTTCTCTTTT	CTTCAGCACT		TTAATGAAGT CACTCAGTTA TCTTCTGGCT	TCTTCTGGCT	TGTATAGTTT
CTCTGGCTGC	CTCTGGCTGC CTTCAAGATT	TTTTCATTGT	TTTTCATTGT CTTTAATTTT TAGCAGTTTG ATGTGTCTAG	TAGCAGTTTG	ATGTGTCTAG
GAGTGATTTT	CTTTGTATTT	ATCCTTTTGG	ATCCTTTTGG GGGCCTCTTA ATTTCTTTGA	ATTTCTTTGA	TCCTTTTTTT
CTTTTTTTT		TTTTTTAAT CAGTTTTGGT CTGTCTCCTC AAGTGGGCTG AAAAAAAAG	CTGTCTCCTC	AAGTGGGCTG	AAAAAAAAG
AAAAATAAAA	TCAT	AGTTTA AAAAACTAAT TTTGGAAAAT TTTCAGCTAT CATTTCTTCA	TTTGGAAAAT	TTTCAGCTAT	CATTTCTTCA

AAATTACAGG	ATTTTTGTC	TTCTCAGTCA	TGTTTTTAT	CTTTTTTTT	GTGTAGTGGC	TGCCTCATCC	TGTATTTTT	ACCTCAGGTG	TGCACCCAGC	AATCCTTTAA
TCTGTGACTC AAATTACAGG	СТБСТТТСТТ	GATAATITCT ACTGACCTAT CTTCAAGTTC ACTGATTCTT TTCTCAGTCA	ТТТААТАТСА	TTCATGTAAC TCTTTGTTCT GGTTTCCATC TCTCTACTCA CTTTTTTTTT	TTTTTTGAG ACAGAGTCTC GCTCTGTCAC CCAGGCTGGA GTGTAGTGGC	CTICCGICCC CIGGGITCAA GIGATICICC IGCCICAICC	GGCTAATTTT		GCCTCC CCAATTGCTG AAATTACTGG CATGAGGCAC TGCACCCAGC	TITGCTGCAT TITGTCTACC TTTTCCATGA AATCCTTTAA
CICCCCICCI CCCCITICCI	GTTCACGGCA CTTGGATGCT	CTTCAAGTTC	ATCCTTTGTC	GGTTTCCATC	GCTCTGTCAC	CTGGGTTCAA	TCCCGAGTAG TTGGAATTAC AGGTGCCCAC CACCGTGGCT GGCTAATTTT	CATGTTGGCC AGGCTGGTCT TGAATTCCTG	AAATTACTGG	TTTGTCTACC
CTCCCCTCCT	GTTCACGGCA	ACTGACCTAT	TGTTGAAGAA	TCTTTGTTCT	ACAGAGTCTC	CTTCCGTCCC	AGGTGCCCAC	CATGTTGGCC	CCAATTGCTG	TTTGCTGCAT
AATATTTATC CTACTCTATG	тататттаас саттттатт	GATAATTTCT	TATCTAGTGT GCTCAACGCC TGTTGAAGAA ATCCTTTGTC	TTCATGTAAC	TTTTTTGAG	CTCACTGCAA	TTGGAATTAC	TAGTGGAAAC AGGGTTTCAC	CTCAGCCTCC	TTTTTATCT
AATATTTATC	TATATTTAAC	TTTCATTTTG	TATCTAGTGT	TTCTAGCATT	$ ext{TTTTTTT$	GCGATCTCGG	TCCCGAGTAG	TAGTGGAAAC	ATCCACCTGC CTCA	TCTGCTGACA

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FIGURE 6 (8)

FIGURE 6 (9)

CATAGTAGTC	ATAGTTACTT	TCAATTCCTT	TCAATTCCTT GTCTGACAGT TCTGACATTC AAGTCTAGGT	TCTGACATTC	AAGTCTAGGT
CTGTTAATAG	CTTTGTGAGT	CTGTTAATAG CTTTGTGAGT CTGTTAACAG CTTTTTTTCA TTCTTGTCTG TGTGTTTTGT	CTTTTTTCA	TTCTTGTCTG	TGTGTTTTGT
ATTTCTTGAT		TGTATGCCAA ATATTGCCTG	ТААААТАААС	ТТАСАТААСТ	CATACTTCTA
TCCAGAAATA	TCCAGAAATA GGCACATTTT	TTGTGTCCAG	TTGTGTCCAG TCATTAGTGT GGAGGGAGGT TGGGGCAGTC	GGAGGGAGGT	TGGGGCAGTC
TAGTCAGTGG	CTGAACTAGG	TTTGGATTTG	TTGATGCTAT ACTTAGAATG	ACTTAGAATG	CACCAGACTT
CCATTCACTG	CAAGAGTGGG	CCATTCACTG CAAGAGTGGG CTGCTGCGCT TTGTGATTCA TGTGAGGCCT GAATTGTGGG	TTGTGATTCA	TGTGAGGCCT	GAATTGTGGG
TTTTTCCTTA	GTGTGTCCCT	CCATGCTCAG	CCATGCTCAG ATTTCAGCAA GTCTTCATAT CTGTGCCACA	GTCTTCATAT	CTGTGCCACA
GAAGGAATCT	GAAGGAATCT GACCCATGCT	CTTTTTGACC TCCCCAAGTG ATCAACTGTT GCTTGTTATA	TCCCCAAGTG	ATCAACTGTT	GCTTGTTATA
GCTTGTCATG	GCTTGTCATG GAGTAAGAGG GTGTTTTTT		AGTTTTCATC	CTCCAGCCTT GGTCTTGGGC	GGTCTTGGGC
CCTGAGCTCC TAGA	TAGACTCCAG	CTCCAG GAGTGGATGG AATCCAGTGA	AATCCAGTGA	TTTCTCAGTA ATTCAGCCCC	ATTCAGCCCC
TTCTCCAGTA		GTGGCAGATC TCTGCTTTGT ATCAGTGCAA GATCCTGGGC TGAGCTCATT	ATCAGTGCAA	GATCCTGGGC	TGAGCTCATT

FIGURE 6 (10)

	TTCTGCCCTT	TTCTGCCCTT CCTCGAGTGG CAGACAGCTC		TTGCTTTCAC	TTGCTTTCAC CCTTCTACCA AAGGCAGTGC	AAGGCAGTGC
	ATCTTTTCTT	GGGCCTCTCC	ATCTTTTCTT GGGCCTCTCC CCATTGAACT TATGACTTTC ACATAAGAGA AGGGCTCATG	TATGACTTTC	ACATAAGAGA	AGGGCTCATG
	TATCAGAGAA	TTCTGTGACT	TTGTGCCACA TACAGAGTCT	TACAGAGTCT	CTCAGTTCTC	TTGCCCTGCC
	CCAGTCTTTT	TTGTGAGCAC	TTGTGAGCAC CTAGTAGAGA CCCTTGGAGA AGAGCAAGGA AGCGAGTATG	CCCTTGGAGA	AGAGCAAGGA	AGCGAGTATG
· Contract rem	GACTTCTTTT	GTGTCTGTCG	ATTGCTTTGT	TTCTCAACTG	CTACTCTTGG	ACTTTAAGAA
e cureez	TTCATTAAAA	TTCATTAAAA TTTCAGCTGT	TTTCTTTTAT TCTTTTTGTT	TCTTTTTGTT	TTTCTTTTT	TTTTTTTT
: (DJ 06	TTTTAGATG	TTTTTAGATG GAGTCTTGCT	CTGTTGCCCA GGCTGGAGTG	GGCTGGAGTG	CAGTGGTGTG	ATCTTGGCTT
	GCTGCAACCT	CCGCCTCCCG	GCTGCAACCT CCGCCTCCCG GGTTCAAGCG ATTCTCCTGC CTCAGCCTCC CAAGTAGTTG	ATTCTCCTGC	CTCAGCCTCC	CAAGTAGTTG
	GGATTACAGG	TGCCCACCAC	TGCCCACCAC CACACCTGGC TAATTTTTGT	TAATTTTGT	ATTTTAGTA GACACAGGGT	GACACAGGGT
	TTCACCATTT	TGGTCAGGCT	TTCACCATTT TGGTCAGGCT TGTCTCAAAC TCCTGACCTC ATGATCTGCC CGCCTCAGCC	TCCTGACCTC	ATGATCTGCC	CGCCTCAGCC
	TCCCAAAGTG	CTGGGATTAC	CTGGGATTAC AGGCATGAGC CACCGCGCCA GGCCTCAGCT GTTCTCTTTT	CACCGCGCCA	GGCCTCAGCT	GTTCTCTTTT

ATCTATTAA CACACACACA TTTATGACGA	CACCTTGCCC ATGGCAGCT GTGGGACTTC TCAGCCTCCT ATCTAATTAA CATACACACA CACACACACACACA CACACACACACACA	GTGGGACTTC CACACACACA CCATATCTAA TGAAAACAGT	ATGGCAGACT CACACACACA CTCTGCAGAA CTGCCAAAAC	TCCTGGTCTC CACCTTGCCCC TAAATCTCTT CATACACACA CCCTATGTAT CCTTCTGTTT TTACCTATCG ATTCTGTATT	TCCTGGTCTC TAAATCTCTT CCCTATGTAT TTACCTATCG
AGACCTGGAT ATCTAATTAA	TCAGGGGTTC AGACCTGGAT TCAGCCTCCT ATCTAATTAA	GCCCTTGGCA CTCCTGGTTC ATGGCAGACT GTGGGACTTC	GCCCTTGGCA	TGAGCTGAGA CATCTATCCT GCCCTTGGCA CTCCTGGTTC TCCTGGTCTC CACCTTGCCC ATGGCAGACT GTGGGACTTC	TGAGCTGAGA
CCTCTCTGCT	CTGTTGAGGA CTTGAATAGA ACAAAAGGCA GGGGAAGGTT GGAATTGCCC CCTCTCTGCT	GGGGAAGGTT	ACAAAAGGCA	CTTGAATAGA	CTGTTGAGGA
ATCATCCAGT	AGGGGTAGGC	CCTGTCTAGT	AGCAGAGGGC	TGAATTGGTG AACTAAGTAA AGCAGAGGGC	TGAATTGGTG
GATTTGCATT	TGTAATTAAA CAGTATTTCT GGGTGTTTCT GTGAGGGTGT CTTCAGAAGA GATTTGCATT	GTGAGGGTGT	GGGTGTTTCT	CAGTATTTCT	TGTAATTAAA
тстссавата	GGCCATGGGA TGTCCAGATA	AACTTGACTG	TTTCTGTGTC	TACCTGCTGG GATGGCTAGT	TACCTGCTGG

FIGURE 6 (11)

FIGURE 6 (12)

	GACACATAA CATCTGTCA AAAAGTTAA ATATCTTAA TCATTTAAT TCATTTAAT CATTTAAT	ACTGACTTGT AGGTGTTAAC ATTATCTGAC GTCATTAATA ATTTTCTTTT AGGGAACTCAA AGGGAACTCAA	AGACACATAA ACTGACTTGT GATACCATAA TGTTGTGTTG	TGTTGTGTTG GCATTTAATA TTACTTTATA TACATTATTA CACAGAATTG AATATGTCAG AAAAGATGTA TATAAGGAGG GCCAAAAAGT CTGAAAAACG	AATTTTATAT AATCAGCATT AATGAGAAAA AGGACAGGAC	TCTTAGAAAA CATGTATTCA TTGGGGCATG TTAGAGGCCA TTCATAAGTAA TTAAGAAATAAT TATGGTACAA GAGAAATAAT
	GACACATAA	ACTGACTTGT	GATACCATAA	TGTTGTGTTG	AATTTTATAT	TCTTAGAAAA
AGACACATAA ACTGACTTGT GATACCATAA TGTTGTTG AATTTTATAT TCTTAGAAAA	CATCTGTCA	AGGTGTTAAC	TAATGGCAAA	GCATTTAATA	AATCAGCATT	CATGTATTCA
AGACACATAA ACTGACTTGT GATACCATAA TGTTGTGTTG	STGCTCTGA	ATTATCTGAC	TTTTAAATTC	ТТАСТТТАТА	AATGAGAAAA	TTGGGGCATG
AGACACATAA ACTGACTTGT GATACCATAA TGTTGTGTTG	AAAAGTTAA	CTCTCCTAAC	CCCGAATTAT	тасаттатта	AGGACAGGAC	TTAGAGGCCA
AGACACATAA ACTGACTTGT GATACCATAA TGTTGTGTTG	ATATCTTAA	GTCATTAATA		CACAGAATTG	GCAGTATAAC	CTAAAGGTAA
AGACCACATAA ACTGACTTGT GATACCATAA TGTTGTGTTG	AACTAGGTG	ATTTTTTT	ATATCAATTA	AATATGTCAG	TTTTCAAATA	ттсатаадта
AGACACATAA ACTGACTTGT GATACCATAA TGTTGTGTTG	TACTGTGC	AGGGAAAGAA	CATGCCATAC	AAAAGATGTA	GTCCAGGCCT	TTAAGAAACT
AGACACATAA ACTGACTTGT GATACCATAA TGTTGTGTTG	CATTTAAT	GGGAACTCAA	GAAGTGTACA	TATAAGGAGG	GAAGTAGCAG	TATGGTACAA
AGACACATAA ACTGACTTGT GATACCATAA TGTTGTGTTG	таатасат	ACATATCAGT	GAATGATATT	GCCAAAAAGT	GCTATTGATA	GAGAAATAAT
AGACACATAA ACTGACTTGT GATACCATAA TGTTGTGTTG	ATTTCTGC	AAACAGCTGC	TGATCTCCTA	CTGAAAACAG	AGGAGGGAGA	ACAGGACGCC

ТТААТАТТСА	AATGATGGTG	GGATTTGCAT	CACAGTGAAG	CATGTGCCAA	TGGTGCAGTA	ATGTTTGAAC	AGGGCCATGG	GAATCTGAAT	ACTATGATAA	GCCAAACAAT
	AAAGGTTAAG AGAGGAGAGC AATTGAGGAG GGGAGAATAG TTCCAGCACA AATGATGGTG	TAAAGAGCAG ACTGGTCTGG ATGGAGGAGGA GGATTTGCAT	AGACCCTTGA AAGCCAGGAT TGAGTAAAGC CACAGTGAAG	TTTATTTTAA GAAGATTAAT CTGGTAGTGA CATGTGCCAA	GAACTAAGTC	ATGCAGGATT GAGGCAATAA ACACCAAACT ACAGTATCAC CAGATAATGG ATGTTTGAAC	TAGATAATCC AGGGCCATGG	AATGAGAGGG GAAAATGACT AACCATAGTC ATCAAATGGT TTTTCTTAAT GAATCTGAAT	TTGCCTAGTT GGTACAGCTG ACTATGATAA	CTTGTT CCTCTTTTAG CAGCTGTGAG TCCCCCACCA GCCAAACAAT
TCGTGGTCAG GATAGAAGAG AAAGACCTTG AGTTGAGCCT TGAACAGTAT	GGGAGAATAG	ACTGGTCTGG	AAGCCAGGAT	GAAGATTAAT	AAACTGAATA GGTAGAAATG AGATGCAGAG AGCCCAGTTA GAACTAAGTC	ACAGTATCAC	GATGGTATTT GGTAATTTAT	ATCAAATGGT	TTGCCTAGTT	CAGCTGTGAG
AAAGACCTTG	AATTGAGGAG	TAAAGAGCAG	AGACCCTTGA	TTTATTTAA	AGATGCAGAG	ACACCAAACT	GATGGTATTT	AACCATAGTC	TTCTTAGGCC	CCTCTTTTAG
GATAGAAGAG	AGAGGAGAGC	TACAAGATGA ACACAGTCAG	CATTTGGGAT TACGTCATTT	CGACTGGCTC GTATGGAAGC	GGTAGAAATG	GAGGCAATAA	AAGGAAAATT	GAAAATGACT	GAGCAACATT	CATGCTTGTT
TCGTGGTCAG	AAAGGTTAAG	TACAAGATGA	CATTTGGGAT	CGACTGGCTC	AAACTGAATA	ATGCAGGATT	GGACGGTTTA AAGG	AATGAGAGGG	TTTGGTGTAA GAGC	TGACTGCTAC

FIGURE 6 (14)

GAGCCTCTTG	GAGCCTCTTG AAAAGGACGA TGCCTTTTCA CTTCTCTCCA AGTGCTTGGC AAATAGGAGG	TGCCTTTTCA	CTTCTCTCCA	AGTGCTTGGC	AAATAGGAGG
CCTTTTGAAG	CCTTTTGAAG TTACTTTATA GTTAGGGGTT CCCAGTGAGT ATTTGAAATA TTAAGTCATG	GTTAGGGGTT	CCCAGTGAGT	ATTTGAAATA	TTAAGTCATG
CCCGTGGTTG	CCCGTGGTTG ACAGCATGGC CCTACTGCTC ATCATCAGCT	CCTACTGCTC	ATCATCAGCT	ATTAACCTTA GGCAAGTTAA	GGCAAGTTAA
TGAACTTTTC	TGAACTTTTC TAAGCCCCCAG TCTACTCATT TATAAAGTGG GATTATTAAT AATGTCTACT	TCTACTCATT	TATAAAGTGG	GATTATTAAT	AATGTCTACT
TCATAAAATT	TCATAAAATT ATGAAGCCTG	AGTTAGGTCA	TTCAGATAGT	GTTTAGTCTG	ATTCTTCGAA
CCTAGTAAAC	CCTAGTAAAC AGTCAGTAAA CAGAAGCAAA TGCCACATGC CTGATTTATA TCCAAGGGGA	CAGAAGCAAA	TGCCACATGC	СТGАТТТАТА	TCCAAGGGGA
GAAAGGTAAA	GAAAGGTAAA AGTGAAATTT	TCATGATTTA TGGATTCAAA		TTATACATTT	CAAAGATGCT
TTATAAGCTA	TTATAAGCTA TTGTTTTGGT AAGAAGAATT GAGCTGAAAC AGAATTTTCT GACAGCAGTG	AAGAAGAATT	GAGCTGAAAC	AGAATTTTCT	GACAGCAGTG
ATTATTAAAT	ATTATTAAAT GGTGAAATAG GCTATTGATG TCTTTAGAGG ATATAGATGT	GCTATTGATG	TCTTTAGAGG	ATATAGATGT	TCACCTTTTG
CATATAAGTG	CATATAAGTG CACAAAATT CACTAAGTAG ATATGTCTGT CTACACAGAG AGAGAGAGCG	CACTAAGTAG	ATATGTCTGT	CTACACAGAG	AGAGAGAGCG
TGAGAGCATT	AAAGTTAGTA	AAAGTTAGTA AACATCCCCC TCGCTTTTTT TTTTTGAGA CAGGGTCTTA	TCGCTTTTTT	TTTTTGAGA	CAGGGTCTTA

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FIGURE 6 (15)					
CTCTGTTGCC TAGGCTGGAG	TAGGCTGGAG	TGCAGTGGTG	CAATCGTGGC TCACTGCAGT CTCAACATCC	TCACTGCAGT	CTCAACATCC
TGGGCTCAAG CGATCCTCTC		GCTCAGCCTC	CTGAGTAGCT	GAGGIGIGCA CCACCACACC	CCACCACACC
CGGCTAATTT	TTAAATTTTT	TTATTGTAAA	TTATTGTAAA GGTGAGGTTT CACCATGTTG CCCAGGTCTC	CACCATGTTG	CCCAGGTCTC
AAACTCCTGA GCTCAAGCAA	GCTCAAGCAA	TCTGCTCACT	TCAGCCTCCA AAAATGCTGG		GATTACAGGC
GTGAGCCACC ACGCCTGGCC	ACGCCTGGCC	AGTAAACCCC	ATTCATTTAC	ATCATCTTAC	TTGTCCCTCC
AAAATCCTGC AAAGTAGGTA GGTTCTGTCT	AAAGTAGGTA	GGTTCTGTCT	ттатттстта	TTATTTGTTA TTTAGGTGAA GAACTTGAAG	GAACTTGAAG
TGGTGTTGAG GAATAGGTGT	GAATAGGTGT	TTTGCCAAGA	TTTGCCAAGA GTCACGCAGC TGGAGTGGCA GAGCTGTATA	TGGAGTGGCA	GAGCTGTATA
CTCTTCTGAT TCCACCAACG	TCCACCAACG	CTGTTTACAT	CTGTTTACAT CACATCTGGA GAAAAGTGCT		CTGAGGCACA
GATGTTTAGT GGGAGGGATG	GGGAGGGATG	AGACACAGGC TGCAATGCCT AAAGATAATC GGGAATAAAA	TGCAATGCCT	AAAGATAATC	GGGAATAAAA
GCAGAAAACA AGACGTTTGT	AGACGTTTGT	TTCTGTTAAA	TTCTGTTAAA ATGAGACAGA	AAATAAGGCG	TTTGTTGTTT
GGGATTGAGC ACTTGGAGAA	ACTTGGAGAA	GTGGGGAGCG	ATTTGATTTG	GGTGAGACTG	CTCCTGGAAT

FIGURE 6 (16)

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GCTGCATCTG	GCTGCATCTG GTTCTGGACT ACTCATTACT AGGCTTATAG AAACTAGCTG GAGGAGGTTC	ACTCATTACT	AGGCTTATAG	AAACTAGCTG	GAGGAGGTTC
AAAGAAAAGC	AAAGAAAAGC TCCAAAATGA TTAGCGGGCT GACGGGATTG ATTTATAAGA AATATTAAAA	TTAGCGGGCT	GACGGGATTG	ATTTATAAGA	AATATTAAAA
GAATTAAATG	TGTATAGCTC	TGTATAGCTC AGCTAAGCAA AGATGAAAGA GACCAGCTAA ATGTATACAA	AGATGAAAGA	GACCAGCTAA	ATGTATACAA
АТАТСТGAAA	ATATCTGAAA CGTGCAAACT TTAAAAAGAG AGATTAATTA	TTAAAAAGAG	AGATTAATTA	TTTAACATGA TACACGGGGG	TACACGGGGG
CACAATATGC	CACAATATGC AGTCACAGGA TGAAAATTTC		AGCTGAGTAT	CTAGAAGAAT	TCCCCGATAG
TGAATCTGTT	TGAATCTGTT AAGGCTGTCT GTAGTGTGGC CTTTCCCTGG AGAGGCAATA GAAATTTCAA	GTAGTGTGGC	CTTTCCCTGG	AGAGGCAATA	GAAATTTCAA
GTCTTACGAT	GTCTTACGAT TTTAAAAGTT	TCTTGGGAAC	TAGGTATTAG ATGATGTTAG	ATGATGTTAG	AGAATTATTA
TTAATTTGGT	TTAATTTGGT CAGGTATGAT AATGGTATTG TAGTTCTATA AGAAAAATTG TATTTTTTAG	AATGGTATTG	TAGTTCTATA	AGAAAAATTG	TATTTTAG
AGTTACATAC	AGTTACATAC CCTGAAATAT AAGCATAGAA TATGATGTAG GAGATTTGCT	AAGCATAGAA	TATGATGTAG		TTAAAATACC
ACAGTAAGGA	acagtaagga aagaaaggaa ggaggaagaa aagaaaggaa ggggaagaa	GGAGGAAGAA	AAGAAAGGAA	GGGGAAGAAA	GGGAAAAAGA
GGCAAAGAAG	GGCAAAGAAG GAAGAGAAGG	TAAGAGAAAG AAAAAGAATG AAGGAAGAAG GCTGGGCACT	AAAAAGAATG	AAGGAAGAAG	GCTGGGCACT

FIGURE 6 (17)					
GTGGCTCATG	CCTATAATCC	CAGCATTTAG GAGGCCAAGT		TGGGAGGATC ACTTAATTAA	ACTTAATTAA
GCCCAGGAGT	TCAAGGCTGC	TCAAGGCTGC AGTGAGCTGT	GATTGCGCCA	GATTGCGCCA CTGCACTCCA GCCTGGGTGG	GCCTGGGTGG
CAGAGTGAAG	CCCTGTCTCT	CAGAGTGAAG CCCTGTCTCT AAAAAAAAA AATAAGTTAA AAAGAAAGAA AAGGATAGAT	AATAAGTTAA	AAAGAAAGAA	AAGGATAGAT
GAAGTATGGC AAGA	AAGATGTTGG		TAATGTTGAA CCTGAAGGAA GTTAATATGT GAGTTCACTT	GTTAATATGT	GAGTTCACTT
TCCTCTTCAG	TCTTCTTTAT	GTATGTTTGC	CAACTTTCAT	AATAAACAAT	TTAAATTATA
TTTTCCTGAT CAAA	CAAAACTTAG	ACTTAG TAGCAGTATT AATCCCTGGG	AATCCCTGGG	CTTCCTGACT AGAACAGCCT	AGAACAGCCT
CATTACCACA TGGG	TGGGCAGAGT	TCTGGCCGAC	CAGGGACCAC	GTAGTGGTTC ACCATCTTGC	ACCATCTTGC
TCTGGTAATG	TGGTCTGGGC	TGAAGGGCCC	TTTCTAAGGT	TGTAGATAGA AATCCAGGAA	AATCCAGGAA
ACTTGTTAGA	ACTTGTTAGA ACTGCAGACC		TATCAGGTA CCTGCAGGAG	GTGAGTCTAC	TAAGGTGAAA
AAGCAGAGGG	AAGCAGAGGG CAGAGGTCGT	GATTAGCAGC TGACCGCCCC	TGACCGCCCC	CTGCTTTTCT GTCCCTCATT	GTCCCTCATT
CGTGGAAAAT	CGTGGAAAAT TGAGTGGAGC	TCAATTTTGA	GTGGAGCTCT	AAGTAGCTCC	ACTTGTAGAC

FIGURE 6 (18)

TAAAGCAGCA TTTAGGAAGA GAATGCATGC TTTTGCTGAT	AAGAGGGTA ATTCATTAAG TGAAAATTTC CAAAATCCAG AAAACATCGA TAAAGCAGCA GCTTAATTTT TTTAAGGAAG AATTTTTTAA ACTATCTTCT TTTGAGCCTC TTTAGGAAGA CCTCACGTCC TTGCCTTGAA TGTTGAGAGT GGGAAATCCA GGGAGTTTTG GAATGCATGC CTTATGTCTG CTTTTTTGTT TGTTAGAGAA ATATAAATAT TTTATCTAGG TTTTGCTGAT	CAAAATCCAG ACTATCTTCT GGGAAATCCA ATATAAATAT	TGAAAATTTC CAAAATCCAG AATTTTTAA ACTATCTTCT TGTTGAGAGT GGGAAATCCA	ATTCATTAAG TTTAAGGAAG TTGCCTTGAA CTTTTTTGTT	AAGAGGGGTA GCTTAATTTT CCTCACGTCC
GGGAAGCAAG TAAAGCAGCA	TATTGAGTTT AAAACATCGA	TCCCCTTATT	AGAAACACTT TGAAAATTTC	TCTTGAATGG	ACCCTATTTT
CAGCTGCAAA	CTGCCTTGGC CTCCCAAAGT CCTGGGATTA CAGGTGTGAG CCACCACACC CAGCTGCAAA	CAGGTGTGAG	CCTGGGATTA	CTCCCAAAGT	CTGCCTTGGC
AGTGATCCGC	CCTGGCCTCA AGTGATCCGC	GTCTCAAACT	GGCCAGGCTG	AGATGAGGTT TCACCGTGTT	AGATGAGGTT
TTTTTAGTAG	GAGTAGCTGG GATTACAGGT GCCCACCACC ACGCCCAGCT AATTTTCCTA TTTTTAGTAG	ACGCCCAGCT	GCCCACCACC	GATTACAGGT	GAGTAGCTGG
TCAGCCTCCC	TGCCTCCGG GTTCAAGCGA CTCTCCTGCC	GTTCAAGCGA	TGCCTCCGG	GATCTCCGCT CACTGAACTC	GATCTCCGCT
GCAATGGCAC	TTTTGGAGAC AGAGTCTTGG TCTGTCGCCC AGGCTGGAGT GCAATGGCAC	TCTGTCGCCC	AGAGTCTTGG	TTTTGGAGAC	TTTTTTTT
TTTCTTTCT	AGCAAAACAC TAGTTTTCTT		TCTTCAGAAT	ATTGAGTGGA GCTCTAAGTG	ATTGAGTGGA

FIGURE 6 (19)

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GGCAGTCAAG CATGAACACA ACCCACTGTT TGAGAAGCTG TAATTTCTGA ATTTCTGCAG CAGTGTAAGG TGTGGGAAAG TGAAGCACAA CTGGATGTCA TTCCCCTTCC TGAACTCCTA GCACCTACAG GGACTCCATC CCTTGTGCCC CACATACCTC ACACGTAGAC ATTCCTAATG TGAATTATTG TAAACTCAGT GCCTCCCACT CTTCTAGTTG CCTCTGCC AGAGTCTTAC CTGTGTTGGT GGTAAGCCTC CTGGCCTCTA GGCTGTAACC CCCACCATCC TCCTCTGCCT TTAGTGGCAC CATCTCAGCT CACTGCAACT TACCTCCCAG ATCAAGCAAT CCTCCCACCT CAGCCTCCCG AGGAGCTGGG ACCATAGGCA CGTGCCATAT ATGAACTCCA GAACCATCGG CTCTGACTGA AAGTGAAGCG GCAGCCGCGT TCTCTCTCAT AAGCAGGCAT TCTTTTTCTC CAGCCCGTCA TTTATGAGAC GGATTTAGCT TAGGCCAGCA AATGGCAGTA AGAGTGAGGT TATTTATTA TTTATTTATT GTGATTGTTC CATTTATTA TGTATCACCC AGGCTGGAGT CTGGCTGGAG TTGGGCCCAC CGCCTCCAGA AAGATTTGAT AGTGCACATC TGCCTTTGTA

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CTGGGATTAT	TACTTATCTG	CTTTATTTCC	AGCTGTGATA	AAAGGCTTTC	GTTCAAGGAG	GCCCACCCCG	AAGATGAGTA	TCAACTTAAC	CTTTGTTTAT
TCCCAAAGTG	ATCGTATATT	ATGTTTTCAC	AAACCTCTGG	GTGAGTAAAC	CCTGTCTGTG	TTAGACTTAA	TAGGGACAGA	AAGCTGCCTC	
CGTCTCAGTC	ACTCATCTTA	AGTAAATGCC	ATCATGAAAT	GCAACTTTCA	тевествстт	ACTCTGGAAG	TCCTGTGTTT	CCACTACCCG	CTTTTTCTAA
GCGATTCGCC	AGCCGCTAGC	GCTCTTCAAG	GGCACTCGCC	CGAGCACTCA	TGCCCAAATC	AGACCTGGCT	TTCCCTTCAT	AATGTTTATT	ТGGТАТАТАА
CTGGACTCAG	CACCATGCCC	CAGACTGCGG	GCACATTCTA	GGAAAGATGA	ATTTATTGAC	ACAGAACCAG	GGGGAAATAT	ACATGCTGGA	AATCCATGAA AGAAACAAGA TGGTATATAA CTTTTTCTAA TTTGTGATGC
TCTTGAACTC	AGGCGTGAGC	GCTTTCCCAC	CCAGTTTGTG	TTACAAACGT	ATTCAGCATG	AGCATAGTCT	GTCCTTGAAT	ATGCAGTGAT	AATCCATGAA
	CTGGACTCAG GCGATTCGCC CGTCTCAGTC	CTGGACTCAG GCGATTCGCC CGTCTCAGTC TCCCAAAGTG	TCTTGAACTC CTGGACTCAG GCGATTCGCC CGTCTCAGTC TCCCAAAGTG CTGGGATTAT AGGCGTGAGC CACCATGCCC AGCCGCTAGC ACTCATCTTA ATCGTATATT TACTTATCTG GCTTTCCCAC CAGACTGCGG GCTCTTCAAG AGTAAATGCC ATGTTTTCAC CTTTATTTCC	TCTTGAACTC CTGGACTCAG GCGATTCGCC CGTCTCAGTC TCCCAAAGTG CTGGGATTAT AGGCGTGAGC CACCATGCCC AGCCGCTAGC ACTCATCTTA ATCGTATATT TACTTATCTG GCTTTCCCAC CAGACTGCGG GCTCTTCAAG AGTAAATGCC ATGTTTTCAC CTTTATTTCC CCAGTTTGTG GCACATTCTA GGCACTCGCC ATCATGAAAT AAACCTCTGG AGCTGTGATA	TCTTGAACTC CTGGACTCAG GCGATTCGCC CGTCTCAGTC TCCCAAAGTG CTGGGATTAT AGGCGTGAGC CACCATGCCC AGCCGCTAGC ACTCATCTTA ATCGTATATT TACTTATCTG GCTTTCCCAC CAGACTGCGG GCTCTTCAAG AGTAAATGCC ATGTTTTCAC CTTTATTTCC CCAGTTTGTG GCACATTCTA GGCACTCGCC ATCATGAAAT AAACCTCTGG AGCTGTGATA TTACAAACGT GGAAAGATGA CGAGCACTCA GCAACTTTCA GTGAGTAAAC AAAGGCTTTC	TCTTGAACTC CTGGACTCAG GCGATTCGCC CGTCTCAGTC TCCCAAAGTG CTGGGATTAT AGGCGTGAGC CACCATGCCC AGCCGCTAGC ACTCATCTTA ATCGTATATT TACTTATCTG GCTTTCCCAC CAGACTGCGG GCTCTTCAAG AGTAAATGCC ATGTTTTCAC CTTTATTTCC CCAGTTTGTG GCACATTCTA GGCACTCGCC ATCATGAAAT AAACCTCTGG AGCTGTGATA TTACAAACGT GGAAAGATGA CGAGCACTCA GCAACTTTCA GTGAGTAAAC AAAGGCTTTC ATTCAGCATG ATTTATTGAC TGCCCAAATC TGGGCTGCTT CCTGTCTGTG GTTCAAGGAG	TCTTGAACTC CTGGACTCAG GCGATTCGCC CGTCTCAGTC TCCCAAAGTG CTGGGATTAT AGGCGTGAGC CACCATGCCC AGCCGCTAGC ACTCATCTTA ATCGTATATT TACTTATTTCC GCTTTCCCAC CAGACTGCGG GCTCTTCAAG AGTAAATGCC ATGTTTTCAC CTTTATTTCC CCAGTTTGTG GCACATTCTA GGCACTCGCC ATCATGAAAT AAACCTCTGG AGCTGTGATA TTACAAAACGT GGAAAGATGA CGAGCACTCA GCAACTTTCA GTGAGTAAAC AAAGGCTTTC ATTCAGAACGT ACAGAACCAG AGACCTGGCT ACTCTGGAAG TTAGAACTTAA GCCCACCCCG	AGGCGTGAGC CACCATGCC GCGATTCGCC CGTCTCAGTC TCCCAAAGTG CTGGGATTAT AGGCGTGAGC CACCATGCCC AGCCGCTAGC ACTCATCTTA ATCGTATATT TACTTATCTG GCTTTCCCAC CAGACTGCGG GCTCTTCAAG AGTAAATGCC ATGTTTTCAC CTTTATTTCC CCAGTTTGTG GCACATTCTA GGCACTCGCC ATCATGAAAT AAACCTCTGG AGCTGTGATA TTACAAACGT GGAAAGATGA CGAGCACTCA GCAACTTTCA GTGAGTAAAC AAAGGCTTTC ATTCAGAACGT ACAGAACCAG AGACCTGGCT TGGGCTGCTT CCTGTCTGTG GTTCAAGGAG AGCATAGTCT ACAGAACCAG AGACCTGGCT ACTCTGGAAG TTAGACTTAA GCCCACCCCG GTCCTTGAAT GGGGAAATAT TTCCCTTCAT TCCTGTGTTT TAGGGACAGA AAGATGAGTA	AGGCGTGAGC CTGGACTCAG GCGATTCGCC CGTCTCAGTC TCCCAAAGTG CTGGGATTAT AGGCGTGAGC CACCATGCCC AGCCGCTAGC ACTCATCTTA ATCGTATATT TACTTATCTG GCTTTCCCAC CAGACTGCGG GCTCTTCAAG AGTAAATGCC ATGTTTTCAC CTTTATTTCC CCAGTTTGTG GCACATTCTA GGCACTCGCC ATCATGAAAT AAACCTCTGG AGCTGTGATA TTACAAACGT GGAAAGATGA CGAGCACTCA GCAACTTTCA GTGAGTAAAC AAAGGCTTTC ATTCAGCATG ATTTATTGAC TGCCCAAATC TGGGCTGCTT CCTGTCTGTG GTTCAAGGAG AGCATAGTCT ACAGAACCAG AGACCTGGCT ACTCTGGAAG TTAGAGCTTAA GCCCACCCCG GTCCTTGAAT GGGGAAATAT TTCCCTTCAT TCCTGTGTTT TAGGGACAGA AAGATGAGTA ATGCAGTGAT ACATGCTGGA AATGTTTATT CCACTACCG AAGCTGCCTC TCAACTTAAC

	FIGURE 6 (21)					
	TTGTTTCCGG TTAA	TTAAAAGAGG	AGGTGGCATT	GAATTGTTTG	TTTGGTTTGG	TTTCTTCTTC
	AATAAGAAGC ATCT	ATCTTAATAT	AACTAGACTG	GACATCTGTC	CCATTTTCAA AAATTACAAG	AAATTACAAG
	TTTCGATCAT TGCT	TGCTAAATTG	TACAGATCCC AATCTGTCTG		CTCTGCATAC	ATTTGCATTT
01 ***	ATAAAAGCAG AAGC	AAGCAGACTA	AGACTA GCAGTCTTTC	TAATGCAATC	CCCCAAATGC ATGAAGTATT	ATGAAGTATT
Carter nea	AGATTGCTTC	TCCCTATTGG	TTCATGCATT	GCTAAAGGCT	TAAAAGGATC	ATTGATTTTA
e crueen	ATTATTTAAT GTGT	GTGTACAGCA	ACAGCA GGCTGAGCTT	CCTTTCTTT	TTAAGGGAAG AACCTTCAGG	AACCTTCAGG
(Dula 20	GGCATTGCTT TAGT	TAGTTTTTA	TTTTTA ATGTTAAATC	TCATTTTTCT	TTGAAAATAA GAAGTTAAAG	GAAGTTAAAG
	CTGTATTCAC ACAA	ACAAGCTCTC	AAAGTGCCAG	ATTTTCATTG	TGTTTTAAA CCATCTAGGA	CCATCTAGGA
	AATGTTTGAT	TCTA	ATGAAA CATTACTGCT	GAAAATTGGG	CTGAAATTGC	TGGGCTGGAA
	АТАТТGТТАТ	ATATTGTTAT AACTTCACAT	GATTCCAGTG	TTGTATTATT	ATTTTTCTT	TTTCTTTTT
	тдасссдата	TGACCCGATA TAGATGAAGC	GAAGAGACAA GGAGCAATCC	GGAGCAATCC	CATGTGTAAT AGAAAAAGGC	AGAAAAAGGC

FIGURE 6 (22)

	ではいざかはごかかご		<u> ттаадствет ттаадствет тттеваттаа аттеадтада</u>	тттССАТТАА	ATTCAGTAAA
GCCIGAALT					
TGGTCCAGGA CTAT	CTATAAATGT	AAATGT TGAACATTTT	TTACCGTGTG	TTACCGTGTG ATTTAAATTT TAGTCTTATT	TAGTCTTATT
СТТТТТТТ Т	TTTTGATGG	TTTACATTTT	CCCCATGGGA AGCAGCTATG	AGCAGCTATG	TCATGTCGGC
ATGATTCATC ATGG	ATGGTAACAT	TAACAT CTCGGGTTAT TTTGGTTTGT GTTATGTTCA GAAAGCGGAA	TTTGGTTTGT	GTTATGTTCA	GAAAGCGGAA
TGCCAAAAAT AAAG	AAAGAGTGGT	TTGTGATGTC	TTGTGATGTC TAGTGTGTCT	TCCTTTAACA AATCAAAGGC	AATCAAAGGC
TTTTATTTAA TCCA	TCCACTTAAT	CTTAAT GGGACACTGC AGAAATTTAA AAAATGGAAG TCCCATCCAC	AGAAATTTAA	AAAATGGAAG	TCCCATCCAC
AGAAGGCAGG TACT	TACTATGATG	TAAAAAGTTT	AGGTGGGGA TTAATAGAGT	TTAATAGAGT	GATCATATAA
TTATGAGCT	TTTATGAGCT AAACCGGAGG CACTTTTTT	CACTTTTTT	TTTGAGATCG	TTTGAGATCG AGTCTCACTG TTGCCTAGGC	TTGCCTAGGC
GGAGTGCAG	TGGAGTGCAG TGACGTGATC	ACAGCTCACT	GCAACCTCCG	CCTCCCGGGT	TCAAGCGATT
TCATGCCTC	AGCCTCCTGA	CTCATGCCTC AGCCTCCTGA GTAGCTGGGA CTATAGGCGC CCACCACCAT GCCCAGCTAA	CTATAGGCGC	CCACCACCAT	GCCCAGCTAA
TTTTTGTGTT		TTTTGTAGAG ATGGGGTTTC ACCATGTTGG CCAGGCTTGT CTCAAACTCC	ACCATGTTGG	CCAGGCTTGT	CTCAAACTCC

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42/285	53/285
43/285	54/285
44/285	55/285
45/285	56/285

FIGURE 6 (23)

TGACCTCAGG TGATCCGCCC ACCTCGACCT CCTAAACTGC TGGGATTACA GGCGTAAGCC	ACCATGCCTG GCCCAGAGAC ACTTTTGAGA GTGAAGAGGA AGCTGAGAAT AATTCACTGA	TCTACAACTG GGACCATCCA GGGCAAGCCA GATGCCATTA CCACTAGCTA GAAAGCTTGC	TTTACCTTGG TATATAGCAA ATTCTTCTTT TGAATTCTGG AAATTCTGGT	GGTAGCTCTG TGCCAAGGAG CAATATGGTA GAATTCTAAT ATTTCAGGCA	TCCTGCATTT GTAGCAGGTA AAGGGAGGTC AGGGCAGAAG ACAAAACCAC	CAAAGGGCAT AAACGTCTAA TGCACCTGAT GTAGCTGATG GTAAATTGTT	ATCAGCTAAA GATCTTTCAT AATAAATAAA CTTATCATTT GTAGGAGGGC ACAGAAATCG	TGGAAAGCTG GGATTCAGGT TGCCTGTGGC TTTAATTCTG GAATCAGAAA TATTAGTCAA		GGATATCAGT CTATGAAGTA AGTTTTCAAT GTTATATGCC ACAAGATGCA GCTGTCCTAT
TGATCCGCCC AC	GCCCAGAGAC AC	GGACCATCCA GO	TTTACCTTGG TA				GATCTTTCAT AA	GGATTCAGGT TG		CTATGAAGTA AG
TGACCTCAGG	ACCATGCCTG	TCTACAACTG	CAAGGTCTCA TTTA	AAGTCATTGA GGTAGCTCTG	GACAACACTT TCCTGCATTT	TGGGACTCGA CAAAGGGCAT	ATCAGCTAAA	TGGAAAGCTG	いったのである。	GGAIAICAGI

FIGURE 6 (24)

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ATCTGTGAGA ATCG TCTTTCAAGA ACTC TGCAAGATGC TCCT TAATATAGGA GGAG TGTTTGAAAT ATCT TGTATGTATA TAGA TATGTGTATA TAGA TATGTGTATA CATA TATGACATA AATA	ATCTGTGAGA ATCGTATGTG TCTTTCAAGA ACTCAATTCA TGCAAGATGC TCCTGAGACA TAATATAGGA GGAGAAGAG TGTTTGAAAT ATCTTATAAT TGTATGTATA TATGTATGACA TATGTGTATA TAGACATAAA TGTATATAGA TATGACATA AATATGTATA TATAGACATA AATATGTATA	ATCTGTGAGA ATCGTATGTG CTGCTTGCTA CACTTTCTTT TTCCTGAAGG CTCTTTGAGG TCTTTCAAGA ACTCAATTCA ATTCAGCAAC AATTAGGGGG TCTAAGGTAT ACAGACGCTG TGCAAGATGC TCCTGAGACA CAAGAGGGG GTCAAGCCC TGCCTTCAGG CACCTCTCTA TAATATAGGA GGAGAAAGAG AAGAAACACT AATACACATA GGTAGGTGCC ATTAAAAGGG TACATACATT AAAGCCAGGT GGTAGGTGTA AGAAGATTTG TAACATGAGA ATTTTCTGCA TGTTTGAAAT ATCTTATAAT TTTTAAAAT TAAATATGGA GATACATATA CATAAATATG TATATATGTGTATA TATGTATATA TATGTATATA GACATAAATA TGTATATATG TATGTGTATA TAGACATAAA TATGTATATA TGTGTATATA GACATAAATA TATATGTGTA TGTATATAGA CATAAAATATGTG TATATAGACA TAAATATGTGTA TATGAGACATA AATATGTGTATA TAGACATAAA TATGTATATA TATGAGACATA AATATGTATA TAGACATAAA TATGTATATA	CACTTTCTTT AATTAGGGGG GTCAAGCCCC AATACACATA AGAAGATTTG TAAAATGGGA TATATATATATA TGTGTATATA TGTGTATATA TGTGTATATA TGTGTATATA	CTGCTTGCTA CACTTTCTTT TTCCTGAAGG CTCTTTGAGG ATTCAGCAAC AATTAGGGGG TCTAAGGTAT ACAGACGCTG CAAAGAGACACT AATACACATA GGTAGGTGCC ATTAAAAGGG GGTAGGTGTA AGAAGATTTG TAACATGAGA ATTTTCTGCA TTTTAAAAAT TAAAATGGGA GATACATATA TATGTATTTA CATATACACA CATATATACA TAAATATATA CATAAATATG TAAATATGTA TATATGTGTA TATATACATA AATATGTATA TATGTATATA TGTGTATATA GACATAAATA TGTATATATG TATGTATATG TATATAGACA TAAATATGTA TATGTGTATA TAGACATAAA TATGTATATA	CTCTTTGAGG ACAGACGCTG CACCTCTCTA ATTAAAAGGG ATTATTCTGCA TATGTATTTG TGTATATATG TGTATATGT TGTATATGT TGTGTATATG TGTGTATATG TGTGTATATG TGTGTATATG TGTGTATATG
TGTGAGA	ATCTGTGAGA ATCGTATGTG	CTGCTTGCTA	CTGCTTGCTA CACTTTCTTT	TTCCTGAAGG	CTCTTTGAGG
TTCAAGA	ACTCAATTCA	ATTCAGCAAC	AATTAGGGGG	TCTAAGGTAT	ACAGACGCTG
AAGATGC		CAAAGAGGAG	GTCAAGCCCC		CACCTCTCTA
TATAGGA	GGAGAAAGAG	AAGAAACACT	AATACACATA	GGTAGGTGCC	ATTAAAAGGG
ATACATT	AAAGCCAGGT	GGTAGGTGTA	AGAAGATTTG	TAACATGAGA	ATTTTCTGCA
TTGAAAT	ATCTTATAAT	TTTAAAAAT	TAAAATGGGA	GATACATATA	TATGTATTTA
	TATGTATGTA		CATATATACA	TAAATATATA	CATAAATATG
ATATGTG	TATATAGACA	TAAATATGTA	ТАТАТСТСТА	ТАТАТАСАТА	AATATGTATA
GTGTATA		TATGTATATA			TGTATATATG
ATATAGA	CATAAATATG	TATATATGTG	TATATAGACA	TAAATATGTA	TATATGTGTA
AGACATA	AATA		TAGACATAAA	TATGTATATA	TGTGTATATA

GACATAAATA TGTATATATG TGTATATAGA CATAAATATG TATATATGTG TATATAGACA TATATGTGTA TATAGACATA AATATGTATA TATGTGTATA TAGACATAAA CATAAATATG GTATATATA ATGTGTGTCA TGTAACCCAT TAAAGAGTCT TCTTTTCCCT GTACCTATGC AATGGTAAGT GGGTCCCCAT AACATTCCCT GTAGTTTGCC CTTAACAGTC CATCTTCACC CCATCCCTTG CCCAAAGAAT CTGGTTATGT GCTGCCACAA CTCCAGTCCA AGCCACAAAC CTCTCTCTCC CTTTCTCTCC CTGCATGAGT CTATTCTCCG CACAACTGGC TTCTGTCTTA ACCTTGCCTG TCTCGCGTAC ATGGAGTTTT CTGCATTATA CCATTCACTT TGTATATAGA TGTATATATG GTATATAGAC ATAAATATGT ATATATGTGT GACATAAATA CATAAACATT AGCAAAACAC ACATTCTTTT CTTCCCTAAA AACTGTCTCA TITGATGIGA AATITACIGI TCCTAGTCTG TGTGTATATA TATATACATA CATCTTTTCT TGGACTCCTG CGGGGAGTTC TATACACACA GGCTCCTGGC TATGTATATA GACCACTGCT TAAATATGTA TATATATGTT **FIGURE 6 (25)**

FIGURE 6 (26)

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GACGGGTGCT GGATATCCGA TGGATGGCCC TTAAGGTGAG CTCACGGGAT AAAGACTTTC AAAAAGTGGG GGCTGGCCAG ATAGGTAAGT GAGACTGCGG AAGAGGCAAG TTTGCAAGTC CAGAGGAAAT GAAGACTCTG CTCAAGGCTT AAGGGAGAGA TAGGGGCTGA TGATCTGAGA TTCATCAGTG TGTGGCTGAT GTCATTCAAA ATCGGACCTC TGAGGCAGGA GGAAAGCCCA TGCTGCTGAA GGAAGTAGCA GGACCGGAAC AGAAGGGTAA TCGTTGGACC TGGAGAACTT TTTAAGGTTG GTAACCTTAA AAAAGAGCAA TTTTAGATAC CTTTTGAAAT AAAAGTAAAA TGCATGCCTG GCACTGTAAC ACCCTGTTTA ATTCTCACGG GTTTAAACCC AGGGACAGG ATAAGAAGGT TATTCCAGGG AGAGCGTAGA TAAAGAAGCT CAACCCTATA GAGTAGGTGT CATCATCCCC ATCTTACAGA TGAGGATATG AGGTGCAGCT TATATGTGTT ATTCCAGGCA AAGGGACCAG ATTCCTGGGA TGCTGGGTTT TGGGTCCTTA ATTTGTTTGG GAACAGTTAC GAAAGAGTAG CTTGTGCACA AAATGGCTTC AATACTTACT GAATTTGAAT TATTGCAAG

FIGURE 6 (27)

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AGATTAAGCA GTTTGCCTCA GGTTACACCA ACTGGTTAAC GTAGAGCTAG GATTTGAACC GGAGCCCCCT GGGCTAGCAA ATTAGGAGTT GTTCAGACAG ATGTGAAAAG GAAAGCAAGG CAGAGGGAAA GTCACTGTAC AGAAGAGAGA ACGCCTGTAA TCCCAGCACT TTGGGAGGCC GAGGTGGGCA GATCACCTGA GGTCAGGAGT TTGAGACCAG CCTGGCCAAT GGCGAAATCC CGTCTCTACT AAAAATACAA AAATTAGCCG AGCATGGTGA CAGGCACCTG TAATCCCAGC TGTTCAGTTG GCTGAGTCAG GAGAATAGCC TGGATCCGGG AAGTGGAGGT TGTAGTAAGC CAAGATTGCG CGACAGAGCA AGACTTTTCT TAAAACAAAA AAAAAAA GATCCCAGAG CTCATGCTTT AAATCGCTAG ACTGGTGCTC ACAGAAGACT GTGAGCTGGT AAAGTGGCTG GCGATCTAGC CCCTGAAAAT AAAAAAATAA GACCCATGAC AGCAGAGACA ACCTCCAGAG AGGCAGGCTC CCAGCCTGGG GGGACCGAAA AAAATTAATA CGGATGGGCT CCACTGCATG

FIGURE 6 (28)					
GGAAGGAAGA	GAAGGAAGGA	GGAAGGAAGA GAAGGAAGGA AGGAAAGAAA GAAAGGAAA GAAAGAAAA GAAAGAAG	GAAAAGGAAA	GAAAGAAAAA	GAAAGAAGAA
AGAAAGGAAA	GAAAAGAAAG	agaaaggaaa gaaaagaaag aaaagaaag aaagaaaata cctccagaga gccaggtctc	AAAGAAAATA	CCTCCAGAGA	GCCAGGTCTC
TTAGGCCTTC	TTAGGCCTTC TGAGAAACTC ACATCCCTTT		TGATGAACAC	TGATGAACAC AAATGCTTCA CACTCTCAAT	CACTCTCAAT
GTTATTGGTA	ATCCAAGTTA	GTTATTGGTA ATCCAAGTTA TCAATATACC TAAATCACTT AGTACTGAAT CTGGCATATA	TAAATCACTT	АGТАСТGААТ	CTGGCATATA
GTAATCACCT AATG	AATGAAGAGA	TAAGAGTCAT	GGAGTATTCT	GGAGTATTCT GAAGCAATTA GAATCAATAG	GAATCAATAG
ACTCAATATA CACA	CACATGGCAA	TGGCAA CAAAGTTGGA TCTTAAAAAC CGACCTGAGT GAAAAAGGAA	TCTTAAAAAC	CGACCTGAGT	GAAAAAGGAA
AGGGAAAGAT	ACATAACACG	AGGGAAAGAT ACATAACACG GTACCATTAT GTAAATTGAT AATATATGCT TACACAATTT	GTAAATTGAT	AATATATGCT	TACACAATTT
GTAAGAACAC	GTAAGAACAC ATACAAATAG	ATACATGTAT	ATTAAATATA	ATACATGTAT ATTAAATATA CTCGAACGGT TACCTATGGG	TACCTATGGG
GTGGTGGCTG	GTGGTGGCTG GAGTGGGGGT	AAGTCCGTAA	GCTGTAATGG	AAGTCCGTAA GCTGTAATGG AACCTAAACA AATACATGAA	AATACATGAA
ACGAGTAGGA	ATCAGAAGGA	ACGAGTAGGA ATCAGAAGGA GTAACAATAA AAATGTGCCA TGAACTGAGG AGTGTAAATT	AAATGTGCCA	TGAACTGAGG	AGTGTAAATT
AATCAACTCA	CTGCATCTGA	AATCAACTCA CTGCATCTGA GGTTAAAAT AGAAAGATGA TAATTGTTAT TCTTATTACT	AGAAAGATGA	ТААТТGТТАТ	TCTTATTACT

FIGURE 6 (29)

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FIGURE 6 (30)

GA	GA	ည္မ	CT GAA	GT GCCAG1	AC TGCTTC?	TC CCTCTGGCAG	TA CTCAAAGG	AT GGAAGCCAAG GTTGCCATAG	TT GTGCTTCAA	AC CCAACTGGA
ACCCAC AATTCTCAGT TCTCTCAGGA AAGCCAAAAA ATGAATTTGA	GGGTTTAGGA TTGTGGTTCT TTTATCTATT ACAGGATTGA TAATATGTTC CTCCACCAGA	CAATAC TCACTTCCTG ACACTACTGC ATATGCAGGA GTGTTACTAC	AATT CCAAATCC	GATTCA ACAGAGCTGG CTACGGATGT GCCAGTGGTC AGATACTTTG	TAGC AACTGCTC	AATT GGCTTTCTTC	TTCTTTAGAA TCACCTGGTA CTCAAAGGAG CTACAAGACA	TCTTGGAAAA ACAATTTTAT	GTTTGC TCAGCCAAGG CCCAAGCTTT GTGCTTCAAA CATGAAATTA	CACATTTTCA ATGGCCTCAC CCAACTGGAT AAAAGAACAA
ACCCAC AATTCT	GGTTCT TTTATC	CAATAC TCACTT	AATTGG CTGCCC	SATTCA ACAGAG	FIGCTG CTGCTC	TTTTCT CAGCTCAATT		CCACTC TCTTGG	STTTGC TCAGCC	AAGATC CACATT
CCCTCCTCAA GGTT	TTAGGA TTGT	TGTTCTGCTT GTAA	CAAGGTAAAC ACAGAATTGG CTGCCCAATT CCAAATCCCT GAACTGAGTG AGAGAAATCA	GAATTATAAT AGGG	CTCATCATAC GCAGGTGCTG CTGCTCTAGC AACTGCTCAC TGCTTCATTT CCTGCCTTGG	TCTTTAAATA CTGC	TTGGGTCAAA CAGCAAATGA	TTGGGCATCC ACTT	TGCCTCTTGA GGTT	GAGAGCTTCA GAAC

ATGGGTCACA	СССТАААТАТ	TAGCTAAAGG	TTGTTTCCCT	GATCATGCTC	ACAAAAGAGA	CAGATCTTTT	TACAGTGGCT	TGTCAGCTTC	TTTTAGTAG	GGTGATCCAC
AGATGCTGGA	TGACTGGGGA CCCTAAATAT	TGTATGGATA TAGCTAAAGG	ATAGATATGC	GTAACTCACA	GCCATGTGTG	TATGTTTTCT	CAGGCTGGAG	GCGATTCTCC	AATTTTGTA	CCTGACTTCA
TGACCA CCTTTTTCAG GTGGGATGGT AGATGCTGGA ATGGGTCACA	CTGGAAGCTC	ATGAACCCCG	TTCTAT TCCTTCACAA ACCTGGTAGA ATAGATATGC	CATTTATGAT GCTGTGTATA GTAACTCACA GATCATGCTC	AGAACC CAATATAAGG AGATTTTTTA GCCATGTGTG ACAAAAGAGA	TGTTCAGAGA AGTATTTGAT TATGTTTTCT CAGATCTTTT	TTGAAA CAGAGTCTCA CTTTGTCACC CAGGCTGGAG TACAGTGGCT	CCAGGTTCAA GCGATTCTCC TGTCAGCTTC	TTACAG GCGCATGCAC CACCATGCCT AATTTTTGTA	CATGTT GACCAGGCTT GCCTTGAACT CCTGACTTCA GGTGATCCAC
CCTTTTTCAG	GCAAAAAGG CTGGAAGCTC	CATGCAGAAT	TCCTTCACAA	CATTTATGAT	CAATATAAGG	TGTTCAGAGA	CAGAGTCTCA	CTGCAA CCTCTGCCTC	GCGCATGCAC	GACCAGGCTT
TCAA	GCATTGCCCA ACCAAACTTT	ATAGGCTCTT	ATGTTTCTAT	TCAACAATTG	CTTCAGAACC	GTGTTGAAAT	TTTTTTGAAA	CTCACTGCAA	GGGATTACAG	TCGCCATGTT
TTGCCATATC	GCATTGCCCA	GCAAAAGTTG	GTTGGCCTTT ATGT	TTAAAAAATG	CATGAAAATG CTTC	GGCCATTTCA GTGT	TATTTTATT	GTGGTCTCGG	CCGAATAGCT GGGA	AGACAGAGTT

FIGURE 6 (32)

CCACCTCAGC	CTCCCAAAGC	CCACCTCAGC CTCCCAAAGC ACTGGGATTA CAGGCATGAG CCACCGTGCC CAGCCTGTTT	CAGGCATGAG	CCACCGTGCC	CAGCCTGTTT
TCTCAGATCC	TGTATTTGTT	TCTCAGATCC TGTATTTGTT TCTGAAGCCT TCATTTCTAT	тсатттстат	CTTCTTATTC ATTTTGGAAG	ATTTTGGAAG
TAGTACACCT AAGTAAGGTT	AAGTAAGGTT	TTTAACAATC AAATATCTTT		GGAAAATTCC	CTGGTTCCTT
TCTTATTCCT	ACAAAAATAT	TCTTATTCCT ACAAAATAT GTTCAGTATA GCTGATGTTA TGTTTCTTTC AAATTATTCA	GCTGATGTTA	TGTTTCTTTC	AAATTATTCA
TTTCTCTATC TCAGAATTTA	TCAGAATTTA	TCTCATGCCT	AATTGTTATT	GAATAGTCTT	CACTTCTTGT
CATCCAGTTT	CTGGTCTCTT	CATCCAGTTT CTGGTCTCTT ATTTCACTCT AAGTCTAAGT GGCTATTAGA ATAAAGAGCT	AAGTCTAAGT	GGCTATTAGA	ATAAAGAGCT
TGTAACAGAT	TCTTTCTCCA	TCTTTCTCCA ATATGTCTTA TCTTTTGACT GCATGCCAGT GACAAACTGT	TCTTTTGACT	GCATGCCAGT	GACAAACTGT
TAACTGTTTT	GATTCTTCAT	TAACTGTTTT GATTCTTCAT AACATTCCAC AGAACATGCT GACTCCTCTC	AGAACATGCT		TTCCTGAAAG
CAATGCCCAA GCACAGCATT	GCACAGCATT	GTTAGATAGT	ATGTACGCAA	ATGTACGCAA CAGGGACATG	GGTGCATAGC
AAAAACTAGA	AGGAAGGAGG	AAAAACTAGA AGGAAGGAGG ACCTTCCTTA GCAATGGGTG ATATGGTCCC TGGACTTAGA	GCAATGGGTG	ATATGGTCCC	TGGACTTAGA
CTCCAAAGGG	TCGTGAGGTG	CTCCAAAGGG TCGTGAGGTG AAACACACAT CGTCCATACC CAGGAAGCAC ACAGGTGGGA	CGTCCATACC	CAGGAAGCAC	ACAGGTGGGA

FIGURE 6 (33)					
TGGAAGAGCT GTGCCTAATG	STGCCTAATG	AAACTTCATC	CACGTGGAGG	AAACTTCATC CACGTGGAGG TGGAGGAGGC TGCAGCTGCA	TGCAGCTGCA
AGAACTCAGA GCTGCCTTAC	SCTGCCTTAC	CCAGACCAGG GACCAGGGAG	GACCAGGGAG	GGCTTTCTGG AGGAAACAGC	AGGAAACAGC
CTCTGAACTG CCAGCTGATA GAGGAGCTCT ACCTCAACTC	CAGCTGATA	GAGGAGCTCT	ACCTCAACTC	TTCTGGTTCC	CCAGGGCTGC
TTTTCCACGT CCATTTATTG GCACTGAAGT TTGAATACCT TCAGGGGCCC GAAAGCCTGC	CATTTATTG	GCACTGAAGT	TTGAATACCT	TCAGGGGCCC	GAAAGCCTGC
CAGGTCCTCT TCTCTGCAGA	rctctgcaga	GCAATCACAC	CAACCTGCAA	CAACCTGCAA AGGGCTAGGA AAGGGCTGTC	AAGGGCTGTC
ATCATCTCCT ACTCAGAAAC TGGTTCACTG GAAGGACTCA GGGGCCACTG	ACTCAGAAAC	TGGTTCACTG	GAAGGACTCA	GGGCCACTG	AATACATCCT
GGCAGCTTTC ACAAGAAGGG CTTCTGACTC AAGGATGTTT	ACAAGAAGGG	CTTCTGACTC	AAGGATGTTT	CCATCTTTGC	CAGGTCGCCT
TTTCTCCTTC TCTTAGAGTT	PCTTAGAGTT	TGGAGGACGC	TGGAGGACGC AAATGTGCTG AGAAGTCAAC	AGAAGTCAAC	CTTTCCTGCA
AGGTGAGACA CAAGGGCCTT	PAGGGCCTT	TCCCAGCAGA	TCCCAGCAGA AAGAAGAGAG CAAATGGAAG	CAAATGGAAG	GTCCTTCTTC
CTCCAGTAGA GGATGGACTC	GATGGACTC	TGTCTGGCAG CCACCCAACA GGAAAAGCAC AATGCATGCC	CCACCCAACA	GGAAAAGCAC	AATGCATGCC
TGCCTGCTTC CCTCCCTCCC TCCGTTTCTC CCTCCCTC	CTCCCTCCC	TCCGTTTCTC	CCTCCCTCCC	TCCTTCCTCC	CTTCCATTCT

FIGURE 6 (34)	
CTTCCCTTCC CCTCCCTTCC CTTCCCCTCC CTTCCCTTCC CCTCCCTCC CCTTCCCTTC	CICCCCICC CCTICCCTIC
TCCCTCTCCT TCCCTTCCTC TTCCCTTCCT TCCTCTTCCC TT	TICCTITICCC CICCCCTICC
TITCCCTICC ICCCICCTI CCICCCTICT ITCCTICCT IC	TICCTICCCI ICTITCCTIC CICATITCCT
CCCTTCCTTC CTTCCTTCCT TCCTTTCTTC CTACTTTCCT AC	CTACTTTCCT ACCTTTAGGG CTCTGTGTCT
TIGGAGICCA TICIGATIAI GCIGIAAIGI CIGCCCCIIC CI	CTCTTCTCTG TCAAAAATG
AAAGACATGG AAGCCACTTG CCTTTTACTG AATTAAAAAT TAGTAAAAGA GCTAAAAAAT	AGTAAAAGA GCTAAAAATT
AATGGTTAAA AATGTACGCA TAAATTATGC AGTATACTAA CCAATGAAAA GATACACTTC	CAATGAAAA GATACACTTC
TCTTAATTAA AAGCTGACAG GGAGGGAAAC AAGAAAAGAG AAACACAAAA CAATAATCTA	AACACAAAA CAATAATCTA
AATGACCTAT TAGTTGGAAG AACAACATCA GAGAAAATAG ATACTGTGTA	TACTGTGTA TAGTCATGTG
TATGTCTATG GAATAACATT TGTAGAGAAA TCTGGACTGA TCCTTTCTGA GTAAAGAGAG	CCTTTCTGA GTAAAGAGAG
CTGTGGGTAC AATTAAGGGG AGATTGAAAG GAATCCAAAA GC	GAATCCAAAA GCATAGCAGA TGCTGTGCCT

FIGURE 6 (35)

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544554747	CTTGCCGATC	CCGATC TCCTCCAAAC TATGAAGTGT TTGAGGCTCA ACTTTAATAT	TATGAAGTGT	TTGAGGCTCA	ACTTTAATAT
)				
TAAGATA	CAAAGACAGA	AATTAAGATA CAAAGACAGA ATGAGAGAAA GAGAGAAGGG AGCTCACTGG AAGAACACTC	GAGAGAAGGG	AGCTCACTGG	AAGAACACTC
аабаттсстт аста	CTCATT	CTCTAAAATT ACAATTGTTC	ACAATTGTTC	TAGATGGAAA AGAAAAAAG	AGAAAAAAG
rCTCTGTT	AAAAAAGGAG	CTTCTCTGTT AAAAAAGGAG CTTGTGCTAT AGGAGGTTTA AAATATACTT CTGACCCATC	AGGAGGTTTA	АААТАТАСТТ	CTGACCCATC
TCCAACATTC TAAA	TAAATCCTTC		CCAGAAAAGT ATGCCAATCC CAAGAAATAT	CAAGAAATAT	тсаатсааат
TGCTGGAAAG AAAA	AAAAATACAA	ATACAA AATATTAAAA TGTATTAGGA AGCGACAGTA ATTAAATCAG	TGTATTAGGA	AGCGACAGTA	ATTAAATCAG
AACTGGAGCA GGAA	GGAATAGACC	TAGACC AGCAGATCAA TGAGACAGAC ATCAAGTCCC GGAATGTGGA	TGAGACAGAC	ATCAAGTCCC	GGAATGTGGA
rGCAAATG	CATTAAGTAA	CTTGCAAATG CATTAAGTAA TATGATATGC AATAAAGGTG GCACAGTGAA CCAATGGGAA	AATAAAGGTG	GCACAGTGAA	CCAATGGGAA
AATTAAT	АААААТТААТ СТТАТААТАА	TTGATATTGC AATAATTGTC		TAGTAATTGG GGGAAGAAAT	GGGAAGAAAT
CTTATTC	AAGCTTATTC CTTATCTCAT	TTCTTTTTT CTTTTTGAGA CAGAGTCTCA CTCTGGTAGC	CTTTTTGAGA	CAGAGTCTCA	CTCTGGTAGC
GGCTGGA	CCAGGCTGGA GTGCAGCGAT	GCGATCTCTG CCCACTGCAA CCTTGCTCTC CCGGGCTCAG	CCCACTGCAA	CCTTGCTCTC	CCGGGCTCAG

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FIGURE 6 (36)

GCGATTCTCC CACCTCAGCC TCCCGAGCAG CTGAACTACA GGCGTGTGCC ACCACTCCCG GCATTACAGG ATGGCTAAAA ATCTGCTGGA TTTCAAAGCA CCCTGAAGAA TACCTCTGAC ATCTATTAAC ACCAAAATTA GTAAACTATG CATGTATGGA GACTTTTATG GGGACCTGAC TTATAAAATG ATGAACTCAA TCTCCCCACT CAAGGTAGGA TTTGCATAGG GGTTACAATT AAAGTTGAGC TTTTAAGGAT TAAATTGGAG ATTCTAAAAA TATTTTTTCT CCAGAAATTT TGCATTGATT GTCCTCTTGT CCCTGTAAAA CATGTTGCCT CAAAGTGCTA ATACCCAGTT GGCTCAGGCA ATCCACCCGC CTTGGCCTCC CCACCAACCA AAGATGCAAG ACTATAAAAC GGGGTTTCAC TTAGACTAAA ATGTTTTTA AAAGTTTTTT CGCGCCTGGC AGCTCATTTC AAGCATCCTA CTGGCGGTTG TAGTAAAAT TAGGCCAACT TTTCCATTT TTTAAAAAT CACCAGGAGA ACCAATCATG CATGAGCCAC GATTTCTATG *TTAAAAATT* TGAACTCCTG GCATTAATAT ACACCTGAAA GTCTCTCAGA

FIGURE 6 (37)			
ATTGAACTTG TTTATTGAGT CAAGAGATAT AGTTTACAAT GAAAATTTGG GGCATATCAA	AGTTTACAAT	GAAAATTTGG	GGCATATCAA
AATGACCTTG GCTTAGCTTA GCATTTGCTG ATGTTAACTA		TTTTCTTCAT TGGGCTGATT	TGGGCTGATT
TTAGTTGCTT AGGAAAAATA CAAACACACA CACTTTAAAA TTATATTAAA ATCCCGTCCT	CACTTTAAAA	ТТАТАТТААА	ATCCCGTCCT
AAACCTCAGA GTCCAGAACC GCATCCTAAC ACTGGTCATG	ACTGGTCATG	CATAATATGT TTAAATTTTT	TTAAATTTTT
GTGCTTTAAA AACTACAAAT AAGGAATGTA 1	TTAATAGTTC	CACAATCAAT	GGTCAGTTAG
CCGAGGGAAG ATTAGCATAG TTAAAGACTT A	AAAATGGCTT	TACAACATAT ATCAAAAGGA	ATCAAAAGGA
CAAAATAAGG GGAACAGAGT CTAGAAATGA GGAAACTGGG ACACAGGCAA AAAAAAAAA	GGAAACTGGG	ACACAGGCAA	ААААААААА
TGAGAACTGG GACATGAATA ACGCAAGGGA TAAGACTAAT ACACAAAACA CCCCAAATAA	TAAGACTAAT	ACACAAAACA	CCCCAAATAA
ATAGCCAGCA TTTGCTGAGC TCTTACTGTG AGCCTGTTCT		AAGCACTTTA CATATATTAA	САТАТАТТАА
CTCATTTCAT CCTCAAGGAA CCATCTGAGG C	CAGGCACTGT	TATCATCTCC	ATTTTACAGA
TAAGGAATAG ACCCAGAGAG GCTGAGCAAC I	TGGGCCTATT	CCACAGCTAC	TATGGTGGAG

FIGURE 6 (38)

ATGAGATTTA AATCTAATCA TTGGCTCCAG AGCCCATGCA CCCAATGGCT GCACTAAGTG TCAGACCTCA CTTTAATAAG CAAGTCTCAA GCCAGAGAGA TGAGTGGTCC TGCGCTTTCA TTTAATAGAC CAGAGAGTTC CAGGCCCCTA ATCCCAGCAC CGGTACATTT GCCTGACCAA TGCTGGTTGC TAGATTTACA GAAAGATTGA GAGGATAGTA GAAAATAGCT GGAGTTCAGG ACTTCTTCTC TACATTCATG CCAGGCATGG TGTTGTTGTT TTCGAGACTA TCGGATCTGC TCGAAATCCC CACACCCAGT TTCTGCAATT ATTAACCTCT TGCCAAAAGT GGGCCACAGC GGCTTTTCAA GTTTATTTT CCTTTCTGTA CTAAAAATAC AAAAAATTAG GCCGGCCGGG CACAGTGGTT AGAGGCAAGC GAATCACTTG AGGTCAGGAG GGCAGCAAAC AGGCTGCTAG CTTACAGAAT GAGAGTGTGA ACTCTACTTG GTCAGGATTG AGAAAATTTT ATGAGCCAGG CTATCAACGT AGCCAAAGCA GGTGGTATCA AATGCATGCG ATACAGTTTT ATGCCCTGTT CCGTATACCT GTTACAATTA CATGGTAAAC TGTACTTTTT TTTGGGAGGC

FIGURE 6 (39)

CTGTATTCCC	CTGTATTCCC AGATACTCAG GAGGCTGAGG CACAAGAATT GCTTGAACCA GGGAGGCGGA	GAGGCTGAGG	CACAAGAATT	GCTTGAACCA	GGGAGGCGGA
GGTTGCAGTA	GGTTGCAGTA AGCCGAGATC GTGCCACTGC ACTCCAGCCT GGGCAACAGA GCGAGACTCC	GTGCCACTGC	ACTCCAGCCT	GGGCAACAGA	GCGAGACTCC
ATCAAAAAA	ATCAAAAAA AAAAAAAA AAAAAGAAGG AAGGAAGGAA GGAAAATTAA TGAGCCAATA	AAAAAGAAGG	AAGGAAGGAA	GGAAAATTAA	TGAGCCAATA
TTGAGACATT	TTGAGACATT ATTATTACTA AAGTCCATGC TTTATGCAGA TTTTCTTAGT TTTTACCTGC	AAGTCCATGC	TTTATGCAGA	TTTTCTTAGT	TTTTACCTGC
TGTCATTTTT		CAGTICCAGG AATGCATICA GGATGCCATA CCACATITAG	GGATGCCATA		TTCTCATATC
TGCTTAGGCT	TGCTTAGGCT CCTCTTGGCT AGACTGAGTT TTAATCTACT TTCTGCAGAG CCTGAGAACT	AGACTGAGTT	TTAATCTACT	TTCTGCAGAG	CCTGAGAACT
TTAGCATAAT	TTAGCATAAT TTCCTTGGAA ATTACAGCTC AATATTTTCA AGCACTTATA CAAACAGCCT	ATTACAGCTC	AATATTTTCA	AGCACTTATA	CAAACAGCCT
AATGTTACGT	AATGTTACGT TGGCCCATAA CAGTGTTTCA AGGTAATAAA CTTCTTTGTT TTCTGTGCCG	CAGTGTTTCA	AGGTAATAAA	CTTCTTTGTT	TTCTGTGCCG
ATTGAAAGAA	ATTGAAAGAA CTGCTGCTTA GCCTCCTGCC AGATGATGAA CTGGGTACAC ACGAGCATTT	GCCTCCTGCC	AGATGATGAA	CTGGGTACAC	ACGAGCATTT
TTCCAGGTAA	TTCCAGGTAA AGCATATTTC	GTGCGACTTC	TTAAGCTGCA	TTAAGCTGCA GCCTTATATG CAATAATTGT	CAATAATTGT
CCATTTACAA	CCATTTACAA GACTTATGTT CGAATTTCAG GCACTCTGTT TTCACTAACC ATATCCTTCA	CGAATTTCAG	GCACTCTGTT	TTCACTAACC	ATATCCTTCA

	FIGURE 6 (40)					
	ACTTTGATAA	ACTTTGATAA GTACTGCTTT AATCAACTCA GAAAATTTAA CTTGACTAAT TTTTTTTCAC	AATCAACTCA	GAAAATTTAA	CTTGACTAAT	TTTTTTCAC
	CATCAGTTTT	CATCAGTTTT TTTTCTGTTG ACTCTTTCTC	ACTCTTTCTC	CTTTTTCTGT	TTGCCCAGAA ACATGCTCAG	ACATGCTCAG
	GATTCTCTCA	GATTCTCTCA GGCTTTAAAA	AATGAAAAA TGTTTCCTGC	TGTTTCCTGC	AATCTAGTTA	CTCCTTGATT
	CTCTTGTTCT	CTCTTGTTCT GTTTATCGCT GGAATTCTTG AAAGCTTGGT GTATTAGTCT	GGAATTCTTG	AAAGCTTGGT		TTTTCATGC
	TGCTGATAAA	TGCTGATAAA GATATACCTG AGACTGGATA ATTTATAAAG AAAAAGAGGT TTAATGGACT	AGACTGGATA	ATTTATAAAG	AAAAAGAGGT	TTAATGGACT
- a.m.	CACAGTTCCA	CACAGTICCA CGIGGCIGAG GAAGCCICAC AAICAIGGIG GAAGGCAAAA	GAAGCCTCAC	AATCATGGTG	GAAGGCAAAA	GGCATGTCTT
n (n. 1- 3/	ACATGGCAGC	ACATGGCAGC AGACAAGAGA GAATGAGAAC CAAGGGATTT	GAATGAGAAC		CCCCTTATAA AACCATCAGA	AACCATCAGA
- \	TCTTGTGAGA	TCTTGTGAGA CTTATTCACT ACCACAAGAA CAATATGGGG TAAACCGCCC CCATGATTCA	ACCACAAGAA	CAATATGGGG	TAAACCGCCC	CCATGATTCA
	ATTATCTCCC	ATTATCICCC ACCGGGGCCC TCCCACACA CGTGGGAATT ATGGGAGCTA	TCCCACAACA	CGTGGGAATT		CAATTCAAGA
	TGACATTTGG	TGACATTTGG GTGGGGACAT	GGCCAAACCA	TATCACCTGG	CCTATAGCAT	TATTTCCATT
	TCTTCCCCAT	TCTTCCCCAT CCTTTTATTC	CTCAAACCGG	TACAACCAGA	CCTCTTTTTT	TTTTTTCTA

FIGURE 6 (41)

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TTTGAG GGTAGCTGAT AAGTCCAAAA TACTGTCACC TTTTCTCAAT	TGCCTT TGGAGCAATT GACTGTGTTG GTTGCCCCCT CCTTTAAAGT	TCCTCTCAA ACATTCCGCT	CCTTCC CCCTCCCATC CCCTAAATGT CCTTGTTTCC CAGAATCTGC	AT TACATTATTG	CATCTGTGTC AATAACTCTG GTCTTTCTGT TAAGTTCCAG TCTCCCATTT TCAAATGTCC	та тстаасасат	AATCTTTCCC ATCAAATCGT TTCCTCTTAA GCTTTTCGTT ATTTCCTATT AGACTCCTGC	CT CTCTTTTGTC	TC TTTTTCTATT	TA TCTGTGGTTT
TACTGTCA	GTTGCCCC	TCCICICI	CCTTGTTI	GGGTCTTI	TCTCCCAI	CTGCTAAATA	ATTTCCTA	ACCATAAC	TGACAATA	GCCCTTTGTA
AAGTCCAAAA	GACTGTGTTG	ATTTTTTT	CCCTAAATGT	ATTCACTCAT GGGTCTTTAT	TAAGTTCCAG	TGTATTTAAC	GCTTTTCGTT	TGAATTTCTC ACCATAACCT	AATGATTACT	AGAAGAGTTG
GGTAGCTGAT	TGGAGCAATT	TTTATG ACTAATGATG ATTTTCTTTT	CCCTCCCATC	ATGCCCTGTC	GTCTTTCTGT	ATCTCTCCAA TGTATTTAAC	TTCCTCTTAA	CTTAAAACCT	AAGTGTTATC	TCATCTAGCA
CTCT	CTTATGCCTT	TGGT	CTTCCCTTCC	TGACTTCTCT	AATAACTCTG	CCAATTGAGT	ATCAAATCGT	ACTICICCCA GGAGCCCAGA CTTAAAACCT	TCCCATAATC AATTAGTAGC AAGTGTTATC AATGATTACT TGACAATATC	TCCCTCCCTG CTATGATCAT TCATCTAGCA AGAAGAGTTG
CCTGAAACTG	TCCGTTCCTT	GTCTCTCACT	ATCTTTTTAG CTTC	CTCACCTCTT	CATCTGTGTC	CCAGACATTT	AATCTTTCCC	ACTTCTCCCA	TCCCATAATC	TCCCTCCCTG

CTGCATCCCT GGATTCAACC AACTGTAGAT GGAAAATATT TGAAGAAAA AGCGTCTATA TACCAGTTGG TATAGATCTT ATAATCTAGA AATGATTTCA AGTACACAT CTGGGACCAA GCCCCTTGCC AATTAATTCA TGTACCTTCA GAATATTCTA TTCTAATTTT GTCATCTCCA CAGCATTTTG TGGCCAACAT AAAAAGTATA AAAGTTAACC AGGTGCTGGA GCATTTGCCT TTTAATCTGG GAGGTGGAGT GCTTACTAAA AGCTTAAAAA TATTTAATGG GCCAGGCGCA GTGGCTCACA CTTGTAATCC CAGACCAGCC TTATTCCCTA AACAATACAG GTGGGGCATA TTTACTCAGT TGTTTTCCTG TCTTTAGTTT TCAGGAGTTC TTTGGTATTT CTACTCAGGA GGCTGAGGCA GGAAAATCAC TTTCTTGTCA TCACTTGAGG GGACTTGAGC ATCTGTGAAG GACAACTATA GATACAGAGG CAATGCCAGG AAAAATTTTA CACTGTAGCG TTTCTTTTC GGGGGGTGTA TGTCTCTACA TATATAAG ATAGTGCTGC CTGAGTATGA ACAGCATTTA LTCCCCCATG GGAGGCCAAG CCAATGTGTT GTGGTCCCAG GGCGAAACCC

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FIGURE 6 (42)

FIGURE 6 (43)					
TTGCAGTGAG	CCAAGATCTC	TTGCAGTGAG CCAAGATCTC TCCACTGCAC TCCAGCCTGG GTGACACAGC AAGACTCTAT	TCCAGCCTGG	GTGACACAGC	ААСАСТСТАТ
CTCAAAACAA	CAATAACAAC	CTCAAAACAA CAATAACAAC AACAAGGAAA AACATTTAAT GGCTGCACCT	AACATTTAAT	GGCTGCACCT	TGCCTGTGAA
AAATGCATTT	CTTGGCCAGA	AAATGCATTT CTTGGCCAGA TGTGGTGGCT CAAACCTGTA ATCCCAACAC TTTGGGAAGC	CAAACCTGTA	ATCCCAACAC	TTTGGGAAGC
TAAGGCCAGG	TAAGGCCAGG AGTTCGAGAC		GAGCTGGGAT ATATAGGAAG ACACAATCTC TACAAAAAA	ACACAATCTC	TACAAAAAA
AATCCACAAA	AATCCACAAA ATTAGTCAGG	CTTATTGTTC	CTTATTGTTC ATGCCTGTAG	TCCCAGGTAC	TCAGGAGGCT
GAGGCAGGAT	TCCTCAAGCC	GAGGCAGGAT TCCTCAAGCC CAGGAGTTCA AGGCTTCCGT GAGCTATGAT GGCACAACTG	AGGCTTCCGT	GAGCTATGAT	GGCACAACTG
CACTCCATCT	TGGGTGACAG	CACTCCATCT TGGGTGACAG AGCAAGGTCC TATCTCTGGA GAAAAAAAA AAAAGAAGGC	TATCTCTGGA	GAAAAAAAA	AAAAGAAGGC
ATTTCTTAGG	ATTTCTTAGG AGAGTTCTTC	TCTGTAGAGT	CCTAAGGGTT	CCATGGAACT	CCTTAAAAGC
ATCAGAGTAT	GTGAGTGCAA	ATCAGAGTAT GTGAGTGCAA TGGGAGGAAG CATTTAGCCA GAGCAGTTGT GCTCCCATTG	CATTTAGCCA	GAGCAGTTGT	GCTCCCATTG
CATATTAATT	TTTAAAAAAC	CATATTAATT TTTAAAAAC AAAGCTATAA AAAAAAGTTG AAAACTACTA CGTTAGCATC	AAAAAAGTTG	AAAACTACTA	CGTTAGCATC
AGCCTGACAT	TTAATGGCCT	CGTAAATCAA ACCTTAATTG	ACCTTAATTG	ACTTTTTAGC	CAGTTATGCT

FIGURE 6 (44)				
ACTAGCCAAC TACAGACAAC	ACAAC ACACTTTTTA ACCAAATTAG ACTAATAGTT	ACCAAATTAG	ACTAATAGTT	GTCATCAGTG
GAAATCAAGT TTGCCATTCT	TCCATGCCTT	TGCTCACACC	ATTACCTTTT	CTGGAATGTC
CTGTACTCAT CTTCCTGTGT		TGAACTCTAT ACCCAACTTT AAAAACCTAG CTCAAAGTTC	AAAAACCTAG	CTCAAAGTTC
AACACTTCCA TTCCATTTCA	TTTCA AAAAGAGCTT	TCCTCTTCCT	TCCTCTTCCT TAAAGTTTAA GAACTCATTT	GAACTCATTT
TCATGAATCT TTTTGGCATT	TATTGCACAC	ATGCTTGCTT	TGTGTTATTT	GTGTTCAGCC -
TCATATGCCC CCAAGGTGTT	TTAGACTCCT	TAACGGCAAA AATGATGCTC TAAACACCTT	AATGATGCTC	TAAACACCTT
TCTATCTTTC ATAGTGTCTT	AGTCTGTTTG	TGTTGCTATA AAGGAATACC		TGAGGCTGGG
GAATTTATTT AAAAAAGAGG	TTTATTTGGC	TCACAGTTCT	GCAGCTATAT	AAGAAGCATA
GTGTCAGCAT CTGCTTCAGG	TGAGGGCTTC	AGGAAGTTTC	CACCCATGGT AGAAGGCAAA	AGAAGGCAAA
GGGGAGCAGG CATCACATAT	CAAGAGAGGA GGAAAAAAG GAAGGAAGAA AGGAGGGTGC	GGAAAAAAG	GAAGGAAGAA	AGGAGGGTGC
CATTCTCTTT CAACAATCAG	TTCTTGTGG	AACTAATGGG	ACAAGAGGCT	GGGCACGGTG

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	FIGURE 6 (45)					
	GCTCATGCCT GTAA	GTAATCCCAG	TCCCAG CCCTTTGGGA GACCAAGGTG GGTGGATCAC CTGAAGTCAG	GACCAAGGTG	GGTGGATCAC	CTGAAGTCAG
	AAGCCTGAGA CCAG	CCTGGC	CAATGTGGTG AAACTCCGTC	AAACTCCGTC	TCTACTAAAA ATACAAAAT	ATACAAAAAT
	TAGCTGGGCC TGGT	TGGTGGCGTG	TACCTGTAGT	CCCAGATACT	TACCTGTAGT CCCAGATACT CAGGAGGCTG AGGTAGGATA	AGGTAGGATA
~	ATCACTTGAA CCCG	CCCGGAAGAC	AGAGGTTGCA GTGAGCTTGT GCCACTGCAC TCCAGCCGGG	GTGAGCTTGT	GCCACTGCAC	TCCAGCCGGG
	GCAACAGAGT	GAGACGGTCT	CAAAAATTT	TAAAAACTTT	ААААТААТА	GAGCAAGAAA
	GCACCAAGTT ATTC	ATTCAGGAGG	GATCCACCCC CAATGACTCA AATACCTCCC ACCAGGCCTC	CAATGACTCA	AATACCTCCC	ACCAGGCCTC
Ø 1 22	ACTTCCAACA CTGG	CTGGGGATCA	GGATCA ATTTCCGTAT GAGATTTGGA GGAGACAAAT ATCCAAACTA	GAGATTTGGA	GGAGACAAAT	ATCCAAACTA
	TATCACATAG TAAT	TAATGAACAT	AGTACCTTAT	CTATAGAAAG	CAATGGCTAG	ACAACTGTTG
	AATGGCTAAC CAAA	CAAATCTGCT	TTCCTATGGT	CTCGCTCTAG AGGGGGTCAG	AGGGGGTCAG	TATGAGTTTC
	TGTCAAAAGG AGAA	AGAAAAAAA	AAAAAA ATGTATAGTC AGTTTTGTGT GTGTGTGTGT TCATGTAAAA	AGTTTTGTGT	GTGTGTGTGT	TCATGTAAAA
	GAGATCAAGA GAAA	GAAAAGAACA	AGAGAAATCA TGAAAAGGAG		GGGGAATATA	AGAATAATAC

FIGURE 6 (46)

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CCTTGGGATT ATCATAGCTC CTTTAAGGTC CCCTCTATGC ACTCAATAAC TTGTTTATCA GTAATACCCA AGGGGGTAGA AATGGTAAGT TGATGAATTC TCCTGACTGT AGATTTGGAT TCCCAGTTGG TGTCTTGTCA TTTTCTTGTG CATAGGAAAT TCATAGTGAT TCATTGTGTT CTCACGCAGC GCTCATGGAG AAGTGGCTAC TGCATCCATG TTATATCTAT GTAATGTTGG GGAGATAAGA AGGGCTGCTA TAATAACTCA AACAAGGACA TAACAAAGAA CTCACCAAGA ACCTAGCTGA AGCCTGTAGA ATGAATAGGT AAGTACTGCC TAATTGTACT TTTGCAGGCT ACTITITIGC ACCITIATIT TGAGTGTATA CAATATTTTT GGAGTACTCA AGCGATGCAA ATGATTCCTT TCTGTAGTTC CTCTTCCTAA AGTTATGATC TTAAGGCTTC CTTGGGTCAT GAGCACTTAC ATAGAAAAA GCAAATTATC CTTCACTTTG ATGGAGCATA AACTGCCAGG AGTGTTCTTC CATTAACTCA TGCTCTTTAT AGATGGAAAA ACATCGAAGA CCCTTTGTTA TTCCCATCAC AATAATCCTT ATCAACAGTA ACCCACAGAT ATGCCAATCT TGTCAGTTTT

FIGURE 6 (47)

CTTGAC TTTTTCCAAG CAGAAATTAC AGCTGATGAC AAGCTGCTGC	TGAATTCAGT TCTACGTGGA AACAGCTGAC TAGTTTCCAT	TAATGGCTTT ACTTCTGTAG	AAAGGAGATT TCATTTGAAG TCCACTCAGG GATTTGGTTC AACAAACTGG AGTACAGGTT	CATCTATAAT TCCTGGAACA	CTGTGTT CTGATTGCCA	TTCAAC TTAGGTTACA AATAGAACAG AATCTCTCTG ATTTTTCTCA	TAGCAAGAAG TCCAGTATCT TCCTGAGAAC	CTAGGA ACTTACTTGG TCCATAAGGT AACAGTCTTA TTTCTGACTA	TCAAGGAGAG AAATAACAGG AGCCATTATC ATCTTCATGG TGTCACTTTT GAAAACTGGT	CTTGCGTTAG TCCATTCAGC TGCTATAACA AAATTGCATA
C AGC	A AAC		C AAC		C TCA	G AAT	3 TCC	r AAC	g TGT	C TGC
CAGAAATTA	TCTACGTGG	TGATTTTGAG	GATTTGGTT	TAAATTTTC	GATTTGTTG	AATAGAACA	TAGCAAGAA	TCCATAAGG	ATCTTCATG	TCCATTCAG
TTTTCCAAG	TGAATTCAGT	TGCTCTTGGT	TCCACTCAGG	CCTCCAATAA TAAATTTTCT	GCCGAG CATATAGATA GATTTGTTGC TCACTGTGTT	TTAGGTTACA	TTTTCCTCAT	ACTTACTTGG	AGCCATTATC	CTTGCGTTAG
ATCA	TTTTC	ATGGCTCTTT	TCATTTGAAG	TCTCTTTAAT	TGCA	CTTTTCAAC	GAATTCCCAC	CAATCTAGGA	AAATAACAGG	CCTCTGTAGA TCTTCAGATT
ACTGCGAAGC	TGAGAAAATG GATA	TGCTGTAAGA ATGG	AAAGGAGATT	TCAGAAAATA	CTTCATCCTT	CTTTGACCTG	TTAATTGTTT	TTCCTTTTCT	TCAAGGAGAG	CCTCTGTAGA

FIGURE 6 (48)

ATTTCTGACA GTTCTGAAGG CTAGAAAGTC	AAAGATTAAG ACACTGGCTG ATTTGGTGTC TGGCGAAGGC CCATTTGCTC ATAGATGGAC	GGGTCTTTTT	TATAAGGGCA CTAATCTCAT TTTTGAGGAC CCTGCCCCCA TGACTTAATC ACCTCCCAAA	ATTTGGGGG	GACAGAAACA CGCAGTCCAT CTCGCTTGTC CACTCCATGG TGGTATTCTT GCTGGATCAG	CAAGTTATAG CAGGCCCGAT	ACCCACGCCA	TAACAGTGGT	TATGTCCGTC AGCCCTTTTC TCCCATAGTA GCCCCACTGT GTTGAAGTGG	CTCCTTATGA
GTTCTGAAGG	CCATTTGCTC	AGAGCTCTCT	TGACTTAATC	TCAACATATG	TGGTATTCTT	CAAGTTATAG	ATCAGAATGA	GAGCCCTGGG	GCCCCACTGT	GGAACCAATT
	TGGCGAAGGC	GAAGGGCAAG	CCTGCCCCCA	GGTTAGGATT	CACTCCATGG	GTCTAACTTG	GCATTGAATA	AGCTGATTAT	TCCCATAGTA	ACATGCTCAT
ACAGAAATGT	ATTTGGTGTC	GCACATGGCA GAAGGGCAAG AGAGCTCTCT	TTTTGAGGAC	TCACCTTGAG	СТСССТТСТС	TGTGTTCCAT	GTATGCAGAG	AGAGAGTACC	AGCCCTTTTC	AGCTTGGGCC
GACAGCATGG CTTATAAATA ACAGAAATGT	ACACTGGCTG	GATGACCTTT CACTCTGTCT	CTAATCTCAT	CCCAATACCA	CGCAGTCCAT	TTTCCTCCTT GGGGTGCATT	TCCAATGTTG	GTAGAGCTGC	TATGTCCGTC	AGAAGCTTCC
GACAGCATGG	AAAGATTAAG	GATGACCTTT	TATAAGGGCA	GGCACTGTCT CCCAATACCA	GACAGAAACA	TTTCCTCCTT	AGCAAAGTAT TCCAATGTTG GTATGCAGAG GCATTGAATA ATCAGAATGA ACCCACGCCA	TAAACAACTG GTAGAGCTGC AGAGAGTACC AGCTGATTAT GAGCCCTGGG	TTTTAGTTCC	CTGAATCGAC AGAAGCTTCC AGCTTGGGCC ACATGCTCAT GGAACCAATT CTCCTTATGA

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GCCGTACAAG AGCTGGGTTG CCATTCTGGA TACCCTCTTT TTTCAAGAGA TTTTATTTCA ATCTTAGGGC AGTGGTGCCC TTTTCCATGG ACCAGTGTCA CCATAATGTA TCTGGGGGCA ATGGGAGATA GTGACAGATC ATCAAGCATT AGATTCTCAT AAGGAGTGCT CAGCCTAGAT GTATACTTTA TGTGTGGTCC ACTTCCTAAC AGGTCACAGA CTGGTACTGG TCCATGGCCA GGGAGTTGGG GACCCTGTCT TAGGGAGTAG AGTITGTITT CCTGCAACTA GACAGTCCCA TGGGGAGCAG TCAAGTACAT TACGTTTGTT TGAAATAATT ACACAACTCA TGCAGTTCAC AATAGGATTT GCTCACCTAT GAGAATCTAA ATTATTAGA CAGGTTTTGT GGGAGACAGT GCCTGCCACT CACCTCCTGC TCGGGCAGTA ATGCGAGGGT **AACTACAGGG** TTGGGATGAG TAATATATAA TTCTTTTATC GCCCCAGGGA AGGCATGGTT GGGAGCCCTA GAGGTGGAGC TTGCTCGCTC TATTATATTG GGGGCTGGG CCCCGGCATG GATCTGACAG AACCTTTTTG **LTTCTATTAT** GGAATCAGTG AGGATATTT AGATGAAGCT

SUBSTITUTE SHEET (Rule 26)

FIGURE 6 (49)

FIGURE 6 (50)

CTAGAAGGCC CTGGATTAGT ATCCCAGAGC TGTCATTACA	GAGTATCACA AACCAGGTGG CTAAAACAG ACATGAATTC TCTCTTATTT TTGATGGCTT	TGTG TAGGGGAGAA	TCCTTCCTTC CTCTTTCTAG CTTCTGGTGG TTTGCTGGCA ATCACTGGCA TCGCTTGGCT	TCAT GTCTCCAGGT	CTCTCTGTCT CTCTTCTTTG TATAAGGAAA CTAGTCATAT TGGATTAAGG GCCAACCCTA	TTCCAGATAA GGTCACATTC	TTTGAAGGAA CACAGTTCAA CCAATAACAG	CTTC ATAGCAGAGA	CAACTTGTAC CAAAAGGCAA AATACCTTAT TATGTAACCT TAACCTAGGA TCATAGATCC	CTACTGTCTG GTGCTTTATA AGCACAGAAC CACCGGGAAA TCATTATTAA GACAAGGAAA
ATCCCA	TCTCTT	CTGAAATGTG	ATCACT	CTCCCCTCAT	TGGATT	TTCCAG	CACAGT	AAAGTT	TAACCT	TCATTA
CTGGATTAGT	ACATGAATTC	CATGCTCCCT	TTTGCTGGCA	TCATAGTGTT	CTAGTCATAT	GCAATGACTA	TTTGAAGGAA	TCTCCTTCCC	TATGTAACCT	CACCGGGAAA
CTAGAAGGCC	CTAAAAACAG	CTGCCAGGGC	CTTCTGGTGG	CTTTACTGTC	TATAAGGAAA	AAGGTCACAT	CTTCATATCT	TAGGTATTCC TCTCCTTCCC AAAGTTCTTC	AATACCTTAT	AGCACAGAAC
CCCTTCACTT	AACCAGGTGG	GGAAGTCCAA AGTCAAGGTG	CTCTTTCTAG	TGCAGCACTT CAACATCTGC	CTCTTCTTTG	CTCTAGTATG ACCTCATCTT	TGAAGAACTG GGAGTTAGGA CTTCATATCT	CCCCTGTACT GTTTTACAAA	CAAAAGGCAA	GTGCTTTATA
GGGTGGAGTT	GAGTATCACA	GGAAGTCCAA	TCCTTCCTTC	TGCAGCACTT	CTCTCTGTCT	CTCTAGTATG	TGAAGAACTG	CCCCTGTACT	CAACTTGTAC	CTACTGTCTG

	FIGURE 6 (51)					
	GGCCAAGTGC	AGTGGCTCAT	GGCCAAGTGC AGTGGCTCAT GCCTGTAATC CCAGCACTTT GGGAAATTGA GGCGAGTGGA	CCAGCACTTT	GGGAAATTGA	GGCGAGTGGA
	TCAACCTGAA GTCAAGAGTT	GTCAAGAGTT	TGAGACCAAA	TGAGACCAAA CTGACCAGCA	TGACAGAACC	CCATCTCTAC
	TAAAAATACA	TAAAAATACA AAAATTAGTT	GGGCATGGTG GCATGTGCCT GTAATCCCAG CTACTCAAAA	GCATGTGCCT	GTAATCCCAG	CTACTCAAAA
SUB	GACTGAGGCA	GGAAAATCAC	GACTGAGGCA GGAAAATCAC TTGAACCGAG GATGCCAAGA TAGCAGTGAG CCAATATCGT	GATGCCAAGA	TAGCAGTGAG	CCAATATCGT
STITUTE	GCCACTGCAC	TCCAGTCTGG	ATGATAGAGC	AAGATCCTGT	CTCAAAAAT	ТААТАААТАА
E SHEET	ATAAAAAGAC AAGGAAAGCC	AAGGAAAGCC	TTTTCCAAGG	TTTTCCAAGG AGACCCTTCT GCTTTGCTAG	GCTTTGCTAG	TTCAGAGAAC
(Rule 26)	TTCTCTTTTG	GAGAAAACAA	TTCTCTTTTG GAGAAAACAA ACACCCAGTC CATTAGCAGC AACGTCAGGG ATTGAATTCT	CATTAGCAGC	AACGTCAGGG	ATTGAATTCT
)	TAGGGCAGCA GGCTGGGCAC	GGCTGGGCAC	AGTGGCTCAT GCCTGTAATC	GCCTGTAATC	CCAGTACTTT GGGAGGCTGA	GGGAGGCTGA
	GATGGGTGGA	TCACTTGACA	TCAGGTGTTC GAGACCAGCC	GAGACCAGCC	TGGCCAACAT GGTGAAAACT	GGTGAAAACT
	CATCTCTACA	AAAAATATGA	CATCTCTACA AAAAATATGA AAAAAAAAA AAAAAAAAA GCTGGGTGTG TTGGCTTATG	AAAAAAAAA	GCTGGGTGTG	TTGGCTTATG
	CCTGTAGTCT	CAGCTACCTG	CAGCTACCTG GGAGGCTGAA GCAGGAGAAT CACTTGAACC CGGGAGTTGG	GCAGGAGAAT	CACTTGAACC	CGGGAGTTGG

FIGURE 6 (52)					
AGGTTGCAGT	AGGTTGCAGT GAGCTGAGAT	TGCCCTACTG	TACTCCAACC	TACTCCAACC TGGGTGACAG AGAGAGTC	AGAGAGACTC
CATCTCAAAA	CATCTCAAAA AAATAAAGAA	TTCTTCGGGC AGCAGTCTTT	AGCAGTCTTT	CCTCCACCTC	ATAGACCATG
GAGGTGAGCC	AGCTCTGACA	GAGGTGAGCC AGCTCTGACA AACCATGAGA ACAATGGCAG AGACATACCT	ACAATGGCAG		GTAACGTAAC
TGACTGGGGC	AAAGACAAAG	TGACTGGGGC AAAGACAAAG GTGAGGAAAA TGACAAGTTT		GAGGAACTAT GAGACCAGGC	GAGACCAGGC
AGTGGGGAAC	AGTGGGGAAC ACCACTAGCA GAAATGATGG		AAGTTCTCAA	AAGTTCTCAA GAATAACAAC AGAGAAATAG	AGAGAAATAG
ACCATGGCCA	GAGTCTAGAA	ACCATGGCCA GAGTCTAGAA CCCTCCAGGG AAAGGAGATG	AAAGGAGATG	GGCTCCAGAG	GCAGAAGAGG
ACGTTGAAGG	GAATGGGGAG	ACGTTGAAGG GAATGGGGAG TGGGTGAAAT ATATAGACGA TGGGGACCAC	ATATAGACGA	TGGGGACCAC	CCAAGAGCAG
TCGCTATTGC	TCGCTATTGC AAAACTGAGG	AGAAGGAGAG	TCTGGAGGGG	AGAAGGAGAG TCTGGAGGGG GTGGTGGGAA GCTGGGTCTC	GCTGGGTCTC
CTAAGGAGGT	TTTGACAAAA	CTAAGGAGGT TTTGACAAAA GCAGTCATGG AGCGGGCTTA GAAATCACAG	AGCGGGCTTA	GAAATCACAG	TTGGGGACAG
GGTAAAGTTC	CTCGGGATAT	GGTAAAGTTC CTCGGGATAT AGAGGATGAG ATTAGAAGAG GTTCCAACTA GGGTAGTGTG	ATTAGAAGAG	GTTCCAACTA	GGGTAGTGTG
GAGAAAAGCA	GAGAAAAGCA CTATTGACCC	AAAAAGGAAG GAGAATGTGG GTGGAAGTGG CAGAGAAGA	GAGAATGTGG	GTGGAAGTGG	CAGAGAAAGA

	(cc) o mionia					
	GGGGTTTGAG	CAGAGAGTGG	GGGGTTTGAG CAGAGAGTGG TGATTTTTCT AATGCAGAGT TGTGGGAGGT GGAGTGCAGG	AATGCAGAGT	TGTGGGAGGT	GGAGTGCAGG
	GAGCCAGGCT	GAGCCAGGCT GGGTGGCTGT	GCTGATGTGA	TTAAGCACTT	ACTGACTGCC AGGCAATGGG	AGGCAATGGG
	CTAAGTACCT	GAGATGCTTT	CTAAGTACCT GAGATGCTTT GTCTGTTATC CCTCCGAAA CCCCTCTGAG CAGGTGCAGT	CCTCCCGAAA	CCCCTCTGAG	CAGGTGCAGT
CLID	TATTATTCTC	TATTATTCTC ACTTCACAGA	TAAGGAAATT	GAGGCACAGA	GAGGCACAGA GAATTGAGTA ACTTACCCAA	ACTTACCCAA
CONTRACTOR NAMED	GGTGACATAG	CTCATATATG	GGTGACATAG CTCATATATG GTAAAGCAGG CTTTGAACTC AGTCTAGCTC	CTTTGAACTC	AGTCTAGCTC	CCGAACCTAA
e or merene	GCTTGTAACT	ACTATGCTTT	GCTTGTAACT ACTATGCTTT TCCCAAAAA AGGGGGCTGG CACAAAAAAA GCTGAGGGGG	AGGGGGCTGG	CACAAAAAGA	GCTGAGGGGG
(D.d. 26)	CTGGGCATGG	TGGCTCATGC	CTGTAATCCC AGCACTTCGG GAGACTGAGG	AGCACTTCGG	GAGACTGAGG	CAGGTGGTTC
	ACCAGAGTTC	AGGAGTTCGA	ACCAGAGTTC AGGAGTTCGA GACCAGCCTG GTCAACATGG TGAAGCCCTG TCTCTACTAA	GTCAACATGG	TGAAGCCCTG	TCTCTACTAA
	AAATACAAAA	AAATACAAAA ATTAGCTGGG	TGTGGTGGTG TGCACCTGTA GTCCCAGCTA	TGCACCTGTA		CTTTGGGAGG
	CTGAGGCAGG	AGAATCGCTT	CTGAGGCAGG AGAATCGCTT GAACCCCAGA GGCGGATGTT	GGCGGATGTT	GTAGTGAGCC AAGATCATGC	AAGATCATGC
	CACTGGACTC	CAGCCTGGGT	CAGCCTGGGT GACAGTGA GACTCCATCC AAAAAAAAGA AGAGCTGAGG	GACTCCATCC	AAAAAAAGA	AGAGCTGAGG

FIGURE 6 (54)					
TGATGGCCAC	TGATGGCCAC CATCAGCATC AGCCTGGAAG TTATAGCAGG ATGCTAAGTT TCTCTAAAGC	AGCCTGGAAG	TTATAGCAGG	ATGCTAAGTT	TCTCTAAAGC
TGTCTTTCTT	AGGA	CTTGAA AAAGATAACT	TGGGTTTGTA	TGGGTTTGTA TCCCATCTCT GCCATTAGTA	GCCATTAGTA
GTTTACTGGC TTTG	TTTGGATAAA	GATAAA TTACTTAGCC	TTACTGAACC	TTACTGAACC AACTTTGGAT	TTTTATAGAG
ATACTGTAAT GAAA	GAAAGGAATA	GGAATA AGGTATCAGT CTTAGCAGAG CATCCAGAGT GTTCCTATTA	CTTAGCAGAG	CATCCAGAGT	GTTCCTATTA
AAACCTAAAT CATA	CATATCCTGT	CATTGCTGTG	CCCCAAACCA	CCCCAAACCA TTCAATGGCT TCCCAACTCA	TCCCAACTCA
AAGTTAAAAA CTCA	CTCATCTTTC	CAGTGGCCTG CAAGAGCCTA TGCTATCCGG TGTCTGACCT	CAAGAGCCTA	TGCTATCCGG	TGTCTGACCT
CATCTGTTGT TCCT	TCCTTTCTCC	TTCTCC CTCCCTTTCT TGGCTCCAGA CGCACTCTGG TCTCCTTGCT	TGGCTCCAGA	CGCACTCTGG	TCTCCTTGCT
GTTCCTTGAA TACA	TACACCAGGC	ACACTCTCTT	CGCCTGAAAC	CGCCTGAAAC ACTTTACCCC AGATATCTTA	АСАТАТСТТА
GCTTACTCTC TGCC	TGCCTCCCTC	TCCCTC AATTCATTGA TGAAATGTCT CAGTGAAGTC	TGAAATGTCT	CAGTGAAGTC	TTCTCTCTCT
CCTCTGTAAA AGTA	TACTCT	CTGTTCCCCT	TCTTTACTGT	TCTTTACTGT TCTAGCTACT ATTGCTGTGT	ATTGCTGTGT
AACAAATCAC	TCCCCAAATT	TAATGAGTGA AAACATCAGC	AAACATCAGC	CATCATCTTA TTTCTCACGG	TTTCTCACGG

FIGURE 6 (55)

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CAATTGGAGA AGGGTCAAAG TCACATTGTA ATCAGAGCCT ATGGGATACG AAGTATTGCG GTCAGGTATG AAAAATTTGA CTGCTTTACT TTCTCCACAG CGTTCATGAT CTGCTTCTCA CATGATATTG CTGGCTAAAA CTGAAACAAA GCAGGGTTCT AGTAGCTGAG TAGTGGCTGA CATATGACCC GTCACAAAAA GCACGGAGCC CAGCATGTAG TGGTATCCAA TAAATACTTG TTTCTGAGGG TCAGGAATTC TGGAAGGGCT CAGCTGGGAG GTTCTGGCTC TATAATCTCT GGGGGTCTCT GGACTCTGCA TGTATTGCCT ATCACTTCCG TGTATTCTAC GGGTTGAAAA TGTCAGCCTG TATAGTTCAG ATCTCCTCCA TTCCTCACAG CATGGTGGCC TCAGGGCAGT TCCTGTCTTC CACACTAAAA CCAGCAAGCA AAGTGGGAGC TCAAGGAGAA GGAACAGAGA TCACATTTCT GAGTCAGATG GCTGAGTATT TCCACACAGC GTCTCTCAGA CCAGAGCCTA TTTCTGCGTT AGGCTTCGCA GGCTGGCTGG TAGTCTGAAC AACCTTGGAA CCAACCAGTT TTTGCTGCAT TATGCAGTGA ACTTACGTCA TGCTGTATCC

FIGURE 6 (56)

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CACCTCCACC CTCAAGCTGA GAGCAAAGCA ATTGCACTTT AAATCCCCTT ACAGCAGATA TTCTGGTTTG TTATTTATGA GGCCTGATTG TTTTCCCCA TGCCTTGCTG TCTTTATAGG CATTTTACCA ATATTTATCA CTATTTCCCT TTGCATGAAT GAATTCTGTC TTTTAATCCT AGCTATAGGT TTCTAAGTTA AATATTACTA TAATCATCTT ACAGACGAGG GAAATGAGGC TCAAGAAGAT TTGGTAACTT ATGCGGGATC ATAATGGAAG AGACAGCATT GAAGTACACA TGCTTGCTCT GTCTGCTCTT TTACAAAAAC ACAATTAAAT GAAAGGTTAG GTAGCTTTTG AATGGCCAGC TCAAAGTTTT CATCACACAG CTGCACCTCT GAGGACTTCC CTCCCCAGTC GCCACAATCC ACTAGCAGAC CAAAATTCAA TTTCAGAGCA TGTTCGGAAG AACCCATCAC ACTTGGCTTT TAGATCTTAT CTCTCCATTG GATATTTGAA ATAATAAAGC CCATTAACAT TCACAGTTCC CTTACCCAGA GACACATG TTAGATCTGT TAAAACCACA CCAAGCTGCT ACTCAGCCAC STTGGTTGCA GGCTTATTTT TAGGGAACCC AGGTTTGTGG

CTTTTGCTCC AGATTTTTTT TACCGCGTCA TTACCAAGCA TCTTAAAACA AAACCTAAAA TCTCATCTGC CATCTTTGAA GGTTATGTCA TGGGCTGACT TCAAATCAAC TACAGAAAGT GACATCTTGC CATATITICIC ACTGITITCIC CGAIGAGGAI TICACATAAI AGIGITIGAA CCTAGAGAAA ATGACAACTC AAATAATCTT AAATGTACCT GTAATAGAGT CACATTCTCT AAGGCCTTTG CTTTATCTTT GGTTTTTCCC ACTAGCTAAC ATCCTATTTT TGACCACCTC CTGCCTACCT CCCCACCTTT ATTATGGCCT TCTTTAAATG TGAGTTCTGA AGGTGAGGGG TATACCCTCT GTCTCCATTT TTGGCCAATC TGAAAAATAT TTCAACATAA TICAAAGCAG ATICTITACT ATITITAICT AAGGTTTTTA AACGGATCTT ACCACTGCCT GTGACATTTA GTGAAGTCTT AGCTGTCAAA TGATTCTTAT TCCTTGACCT GGCAAAGATT TCTTTTTAAT TGTAATTAAA CCAAGAAAA TTTAAAATT CTTTGCACTA GGCTAAAGAC CTTCTCCTTC TTTCAAGTTC CACTTATTTC ACAAAAATCT TAACTTATAT **FIGURE 6 (57)**

FIGURE 6 (58)					
TTCTCACTTG	TTCTCACTTG GCACCTTACC	CAGTGTTCAA GATTCCCTCC TTTAGGATGT	GATTCCCTCC	TTTAGGATGT	CTTCAGAGCA
GCTACACAGT	GCTACACAGT TGGTACTATA	ATTTATACAT	CCTTGTACAC AGGGCTTGCT		GGGATATTGA
TGGAGAGAAG	TGGAGAGAAG GAGGAAACTG GAAGTAGTTC AGGCCAGAGC TAGGGAAATT	GAAGTAGTTC	AGGCCAGAGC		GACCCATCTC
CAGGTCTCAG	CAGGTCTCAG GTCTGCAAGG GGAGCTCACA GCTTAACACA TGGAGTCTAG AAACTTGTGC	GGAGCTCACA	GCTTAACACA	тесавстстав	AAACTTGTGC
TGGACCTTGA	TGGACCTTGA CCAACACCAG	CCCATGGAGT	CCAATACAGT	GCTCAATAGG	GATTTCCAGG
AAATTGCTAT	AAATTGCTAT ATTTATTCAA AGAGAACTTA	AGAGAACTTA	CCAAGTGTCA GCTACGTGTT		GGGCATTGTG
CTAGGCACAG	CTAGGCACAG GGACCACAAA GATAAGACAT TGTAGCTTTC	GATAAGACAT	TGTAGCTTTC	CTTAAGTTGC	TCACTGAGTA
AATAGAGAGA	AATAGAGAGA CAGAAAGGTA	AACAGGTAAG TGCAAAATA CATACAATTC AGCAATAGTG	TGCAAAAATA	CATACAATTC	AGCAATAGTG
TTCATAGTGG	TTCATAGTGG CTATGGAGAG AACGCTCACT	AACGCTCACT	AACTTTGTTT	AAACAGTTGT	TCTTTCAAGG
ATTTGACATG	ATTTGACATG GATTTGATTG GAAAAGCATG ATACCATTTT	GAAAAGCATG	ATACCATTT	TTGCAATTAA ACACAGGAAT	ACACAGGAAT
ACATAAATAA	ACATAAATAA AATGCATCAG	TATTTTTAC	AAATAGCTAC	TATTTTTAC AAATAGCTAC TAAGAGCTAC TAGAAAACCT	TAGAAAACCT

FIGURE 6 (59)

CATGCTACTT GCTCTAAAAT ATTTTATTTT ATGTTATTTT	CTACAC AAACACCACT GTTTTCTTCA TTTCTTAGTC TATTTAAACC	ACTACCATCT GTTAGTTCTC CTGTCCTGAA	TGAAACAAAA ATGGCAGAAT GTAAAACGAG GGCGAACAGA TTTTTGACAG GAAGTATTCA	GATAAACGAA AACAATAATA ACTTTATACA	TAAAAAGTTT AAGATCTCAA GAGCTATGTC TGAATAGATA	TAATTAGGAA AATAACAAGA ACAGTGAATT TCTTAATGAA	ACTTATCGTC TAATTCATAA TCTTGAATGT TTTTATTTTA	TTGAGACAGA GTCTTGCTCT GTCACCCAGG CTAGAGTACA	GCTCAC TGCAACCTCC ACCTCCCAGG TTCAAGCGAT TCTGCTGCCT	ATTACAGAGG CCTGCCACTG CACCCGGCTA ATTTCTGTAT
ACTT GCT	CACT GTT		CGAG GGC		GTTT AAG	GGAA AAT	CGTC TAA	CAGA GTC	CTCC ACC	GAGG CCT
	AAACAC	TTAATTTT	GTAAAA	TAGTCA AGACACATAT			ACTTAT		TGCAAC	
AAAACCTTAC	TTACCTACAC	TCAGCATCTC	ATGGCAGAAT	GAAATAGTCA	TAGACACATT	CTCTATTAAG	TGGCATGTAA TCAAAACTGT	TTTATTTATT TTTTTATTT	CTCAGCTCAC	AGTAGCTGGG
GGGAATTCTT	GTACATTTCT TTAC	TCACACCCTT	TGAAACAAAA	GAGGTAGAAG GAAA	TAACAACTTA TAGA	GGAGTAAAAA CTCT	TGGCATGTAA	TTTATTTATT	GTGGCGTGAT CTCA	CAGCCTCCTG

FIGURE 6 (60)

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CCACGCCTGG CTATTTGACA GATGGCTTTC AAGGAGGAAT TTTAAAAACT GAGCTTTGAA ATGGGCCAGG CGCAGTAGCT CCTGCCTGTA TTTAAGACCA CCAGGTGTGG TGGCATGCAC CTGTAGTCCC AACTACTCAG GAGGTTGAGG GAGGAGAATT GCTTGAACCT GATGGGGTTT CACCATCTTG GCCAGGCTGG TCTTGAACTC CTGACCTCAT CCAATGCTGC CACTTACTGA ACGCCCTTAA ATGACTTAGT AACAAGTAGT TTAATAAAAT AAGAGACAAC ATGGGCCTTA AATCTGTCTT TAAGGATTTC GCGTGAGCCA CCCTGTCTCT ACTAAAACG CAAAATTAG AGGTCAGGAG TTTGGGAGGC CAAGGTGGGC GGATCACCTG TGATATGAAA GGGATTACAG CATATGTAAG GTGGAATAAT GAAGATTTAA GAGTTATTTA TTACAACTAT GGATAGTGTT CCAAAGTGCT TTATTATTG GAGTCAAATC AAACCTATGA AAAGTGTTGA AATTATTAAA CCTTGGCCTC TGTCTTTCTG CATGGTGAAA GATCCACCAG AATACACTTA TTTTAGTAGA CTCTCTCAGC AGCTGCTATT GCCTGGCCAA TCGAATGTCT GACTTTGATG ATCCCAACAC

FIGURE 6 (61)

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GGAGGTGGA	AGGAGGTGGA GGTTGCAGTA ACCCGAGATG TCACTGCACT CCAGCCTGGC AACAGAGCAA	ACCCGAGATG	TCACTGCACT	CCAGCCTGGC	AACAGAGCAA
ACTCCATAA	GACTCCATAA AGACAACAAA AGCTTTGAAA TTGTGTAAAT GAGTTGTACC TATCTTCATT	AGCTTTGAAA	ТТСТСТАААТ	GAGTTGTACC	ТАТСТТСАТТ
AAGAAATTC	TAAGAAATTC ATCTTTGTTC	ATTTATTTT	ACTTGACATG	ACTTGACATG AGAGCTTCCA GCAATTTTTA	GCAATTTTTA
TTAAGCCCT	ATTAAGCCCT CACAGATTTT	ATGTCACTGG	CTATGTGATA	ATGTCACTGG CTATGTGATA AACAAATTAT TTGCTAAAAT	TTGCTAAAAT
AATATTCTTG	CTTCTTTTT	AAGGAATTGT	CTCCCTAGAA ACGGTTTGTA	ACGGTTTGTA	CCAAACAATA
ACTGACTTT	CACTGACTTT ACACAAATC AGATCTGATT GGCAACAGTT GCAGATGTTT	AGATCTGATT	GGCAACAGTT	GCAGATGTTT	TCAAAAGATT
TCATTTGAG	TTCATTTGAG AAGGGGCCCA	TTTGGGTTAT	TTAGATTCTA	TTAGATTCTA AGAACTGAAA CTGCTTTGTT	CTGCTTTGTT
TGTTTTTCT	CTGTTTTTCT GGCTTCTGGG AGAGGAGGAG ACATGAATTC AGTTAGCACC TTGGTATTTT	AGAGGAGGAG	ACATGAATTC	AGTTAGCACC	TTGGTATTTT
CTTTATCCTT	CATTTCAATA	CAGAAGATGC	TTCATATGCA	CAGAAGATGC TTCATATGCA CAGTGGTGTC AGGTCACATC	AGGTCACATC
AAAAGAAAGA GAAA	GAAACAGTTT	CTTGGTTTTT	AATTTTCAAC	CTTGGTTTTT AATTTTCAAC CGGAAAGGAA AGGCACCCAT	AGGCACCCAT
TTGTTCCGC	TTTGTTCCGC TCTAATTAGC CAGTGCATGA CTTAGAGAGC AGGCAGATGC TTTGAAGGCG	CAGTGCATGA	CTTAGAGAGC	AGGCAGATGC	TTTGAAGGCG

FIGURE 6 (62)					
TGGTAACACA	TGGTAACACA GGTCTTCATT AATCTCCACG CAGGACTTGC ACTTCTACTA TGCCTAGGCT	AATCTCCACG	CAGGACTTGC	АСТТСТАСТА	TGCCTAGGCT
GAAGAAAATG	GAAGAAAATG GCTCAGGAAG ATGAACAATC TCACAGAGCC	ATGAACAATC		CTAACTAACT GAAGCCAGGT	GAAGCCAGGT
GTTATAAAGC	GTTATAAAGC ACAAGTCAAG AGGGTGAGAA ACTAACGTTC	AGGGTGAGAA	ACTAACGTTC	TTGAAATCTC CCACTTCTTT	CCACTTCTTT
CTACGTCAGA	CTACGTCAGA AGAGCCAAGC	тсаттаттт	TGATTATTTT AGTTGGAATT TAGAAATTTT TAAAAATTAT	TAGAAATTTT	TAAAAATTAT
TCTAAAGTCA	TCTAAAGTCA TGAACAAGCC	TAATTATAAA	TAATTATAAA GATAGTTGCT	GTGAAGGTGC TGAAATAACT	TGAAATAACT
CGATTTTACC	CGATTTTACC AACCCCCTCT	TCTGGAGGAA GCCATAATGG AATCCTGTAC AATGTTCACT	GCCATAATGG	AATCCTGTAC	AATGTTCACT
CTACCAACGA	CTACCAACGA ACTCTTGTTT		TICTAATGAG GAAACAGAGG CCCACAGTAT TAAACTATCT	CCCACAGTAT	TAAACTATCT
TAACCAATAC	TAACCAATAC AAAATGACTA	GTGCTCTGGT	ССТТТТТТА	AGCACTAAAA	TTTTGATCCA
ATAATAAATC TGT	TGTCCATTAG	CCATTAG AAGGAGTTTC CCTAATGTAC TGGTTCTAAC TTGTTCCCTT	CCTAATGTAC	TGGTTCTAAC	TTGTTCCCTT
CAAGGGGCCA	CAAGGGGCCA GTGTCCCGTA CACATAGCTA AATGGGACTT CTCTTCAACT ACCATTACCC	CACATAGCTA	AATGGGACTT	CTCTTCAACT	ACCATTACCC
AGAGGGCAGA	AGAGGCAGA ACCTAAAATG		CTGTGAATGA CATTCTGCTG TTCACATCTC AGCAGCA	TTCACATCTC	AGCAGCA

FIGURE 6 (63)	_				
GTGTTGCATT	TGAGCTTCTG	GTGTTGCATT TGAGCTTCTG CAGGGCCACC CAGGACCTAT ATCTGCTCAG ATGTTTAACT	CAGGACCTAT	ATCTGCTCAG	ATGTTTAACT
CATCTAATTC	CATCTAATTC AGTGAACACT	TCATTCTAGT TAACTGAACA		TCTACTTTGT	ACAAGGCACT
ACAGCGGTTC	AGAGATGAAT	ACAGCGGTTC AGAGATGAAT AAAATCATGA GATTCCACTG TCTCCTATAA ACCATCACTT	GATTCCACTG	тстсстатаа	ACCATCACTT
TGGGAAATTT	TAGAAATGTG	TGGGAAATTT TAGAAATGTG GGTAAGCTCC AGGGCTTCCT GCAGCGTAGA AGTCACAAAC	AGGGCTTCCT	GCAGCGTAGA	AGTCACAAAC
TCAAATGCCT	TCAAATGCCT GCAGAGGCCC	AGCTGACAAC	ATAAGTAAAT	GATTCTGGCT	GGGCGGAAAA
CAATTACGGG	CAATTACGGG TGGGTGGGTT	TCCAGCTGGG GAGTGCACGC		CTGTGTTAAA GGACAGCTGC	GGACAGCTGC
TACTCATTTC	TACTCATTTC CAGCCAACTG	TGTTCCCATG	TGTTCCCATG TAGAACTGCG GCCCAGTGTA GCCAGTACCG	GCCCAGTGTA	GCCAGTACCG
AAGATTTCTC	AAGATTTCTC AGAAAAAGCC	GGAGATCTCA	GGAGATCTCA ATGTTAGTGT AAAATCTCTC AAATTTCCAA	AAAATCTCTC	AAATTTCCAA
GAGGATTATA	GAGGATTATA TGGGGCAAAG	GTTCTCAGAT	CAGTTTGCAG	TCTCTTACTT	AGCCCATGTG
CAGAGCAGTC	GTAGAGGGTA	CAGAGCAGTC GTAGAGGGTA GCATGCAGTG TCCTACATAA TAATTCTTTT	тсстасатаа	TAATTCTTTT	TTATTTTATT
TTATGCCTTC	CTCCTTCCTG	TTATGCCTTC CTCCTTCCTG TCTCTTTA ACCTTTCTTC TTCCCTCAGG	ACCTTTCTTC	TTCCCTCAGG	CTGGCTTCTT

	FIGURE 6 (64)					
	CCCTCAGCCT	CGTCCGACCC	CCCTCAGCCT CGTCCGACCC CAGCCTGGGT TCAATGAACA TTCGGTAAAG GAACACGGAA	TCAATGAACA	TTCGGTAAAG	GAACACGGAA
	TGTCAAGCGC	ATTAGAGACA	TGTCAAGCGC ATTAGAGACA ACCTTGAGAC	ACATTCCTCT	TGCGGTAAGC ACTTCACTGT	ACTTCACTGT
	AGATTTTAA	TTTTAAACAA	AGATTTTAA TTTTAAACAA GACAATGTTT	ACGACTTGCT	TCTTTCAGGG AAGAGCGATA	AAGAGCGATA
SUB	TCAATTTTAG	TGAACACTTC	TCAATTTTAG TGAACACTTC AAGGCTGAGA TACGCTAGGA GAGTCGTGTG GTGTTGCACA	TACGCTAGGA	GAGTCGTGTG	GTGTTGCACA
STITUTI	GCAAAGAATT	CCACTTTGAA	GCGAGTGGGA	GCGAGTGGGA AAAAAAGCAT	CAAATGCCAC ATGTAACTCA	ATGTAACTCA
E SHEET	CCGCCTGAAG	CCGCCTGAAG GGTTACATTG		GTATGAAACC TGGGTTTAAA AAGGGACCGA ATAGACTAGC	AAGGGACCGA	ATAGACTAGC
(Rule 26)	CATTAAAAGA	CCTGCGTACA	CATTAAAAGA CCTGCGTACA ACCTCTCTCT	CTCTCTTTGA GAGATAATGT ATCTGGACAA	GAGATAATGT	ATCTGGACAA
)	TAAACATGAA CAGAGTGGAG	CAGAGTGGAG	TCTATCCTGT	TTAAAACATT	GCCTACTGTA CAGGCACCAG	CAGGCACCAG
	GAGCTGAAGG	GAGCTGAAGG GTCAGAATAT		TAGCAGTGGG AGCTTGATTA GAGTTGATGA GAGATGGGTA	GAGTTGATGA	GAGATGGGTA
	GTAGGAGGAA	AGAGTGAGAT	GTAGGAGGAA AGAGTGAGAT AGAGGAAGAG GACATGGGGG TTACCCATAA GTGGAGAGTA	GACATGGGGG	TTACCCATAA	GTGGAGAGTA
	GAAAAGTAGA	GAAAAGTAGA ATCAGCTGGC		CATCAAAGGG CGTGGGACTG AGGAACAGTA TGGCATGTAT	AGGAACAGTA	TGGCATGTAT

	FIGURE 6 (65)					
	TAAATATACT	AAGCGCTGAC	TAAATATACT AAGCGCTGAC ATTGGAGGAG AACTAGGAAG TTAAATGAAA TCAATAGGGG	AACTAGGAAG	ТТАААТGААА	TCAATAGGGG
	ATGATGGAGA	ATGATGGAGA ATAGTTAGGT	GTGCAGGGAT	TAGGGTTATG	ATAGAAATAC	ATGTGAATAC
	ATGCAGTATT	GTCCTGGAAA	ATGCAGTATT GTCCTGGAAA ATGGTTAACA GTTGGTTCTC	GTTGGTTCTC	CTGGGGGTG AGGGGAAGCC	AGGGGAAGCC
SIIR	CTGATTTGTA	ATATTTGCCT	CTGATTTGTA ATATTTGCCT ATTTCTGTGG TGCAAATACT CCCACCATGA CCAGTTTCAA	TGCAAATACT	CCCACCATGA	CCAGTTTCAA
ייי ודוד?	GCTATGAATG	TTGAAGTCAC	AGAAAGCAGG	TTGGGAGGAG	ATGCGCACAT	TTGTTCCCCG
SHEET	GCAAGGTGGA	AGGTAAGGAA	GCAAGGTGGA AGGTAAGGAA GGTGAAATCA ACAAGGTCAA AGAAAACTCA AGATTTCGAG	ACAAGGTCAA	AGAAAACTCA	AGATTTCGAG
(Rule 26)	GTGCCTCAGG	TCTGAGGGGC	GTGCCTCAGG TCTGAGGGGC AATGAAGTCT AGGAATGGCT GTGCTGAGGT AGCTGAAATA	AGGAATGGCT	GTGCTGAGGT	AGCTGAAATA
1	GAAGTGACTG	GAAGTGACTG CAGAGGTCAT		AGGTGAAAAC	GAAGCTGAAG AGGTGAAAAC AGAAATTAGA AAGGCAAACC	AAGGCAAACC
	CCCACCGCCC	CCCACGCCC AACCCCCACC	CCTGCAGCCA GTTTCTGAGG	GTTTCTGAGG	GTGACAATAG AGGAAAGGGT	AGGAAAGGGT
	GGAGATGGAG	TTCAGGTCCA	GGAGATGGAG TTCAGGTCCA GAAGCCATAG AAGCGAGTGT GACATTGTGC TCAAGGTCAG	AAGCGAGTGT	GACATTGTGC	TCAAGGTCAG
	CACATGTCAG	TGTGGGGTGT	TGTGGGGTGT CACATGCTGT TGTGAACCAT CATTTATCAC CAATTATGGA	TGTGAACCAT	CATTTATCAC	CAATTATGGA

AGACCTCCTA TGGGCATCTT GCCATATGCA TTATAAAGAT GTGTAAGAAG ACATTTCCCT	GAATTA GGGCTGTACA CAGATACTGT AGAGTGCCAT GTGCCTGGTA	CAGATAAGGT GTGTTAGAGG TTAAAAGATG AGGCTCTTAA TATTAATGAT AGATCCCACT	TTACCTGCAT TCCCTTTGAC	GTTCAGAACA ACCCATTTTA CAGATAGGGA AATTGGGTCA GAAAGTTTCA GTAACTTATC	CAAGGTCAAC ACAATTGGCA AGTGCCAGAG CTGAGCCAGG AACTGAGGTC CTTCTAACAC	ATTTTCCTCC CCCAGAAGAT AATACTCTGA	TGGAAATGAA GGATAGTGTA ATAGGAGATT CGGTGTTCCT TTTTTAAAA AAAATTCAGC	TAAAAAAAT TTCCCTTGTG CTTGCATGTG	TTAGGATCTG CTGTTAGCAA GTGTATTTTT GTGTGATTGA GTGGGAGAGT	
TTATAAAGAT	CAGATACTGT	AGGCTCTTAA	ATTAAGTGTT	AATTGGGTCA	CTGAGCCAGG	ATTTTCCTCC	CGGTGTTCCT	TAAAAAAAT	GTGTATTTT	
GCCATATGCA	GGGCTGTACA	TTAAAAGATG	TGTGCCTAGC	CAGATAGGGA	AGTGCCAGAG	TCACTGTGCT	ATAGGAGATT		CTGTTAGCAA	
TGGGCATCTT	AGGAGAATTA	GTGTTAGAGG	TACCTGAGTC TGACTTACAA TGTGCCTAGC ATTAAGTGTT	ACCCATTTTA	ACAATTGGCA	GTCTCCCCAA	GGATAGTGTA	CTAAAGAGTC AATTCATGTT	TTAGGATCTG	
AGACCTCCTA	CCACTTGGTG AGGA	CAGATAAGGT	TACCTGAGTC	GTTCAGAACA	CAAGGTCAAC	CAAACAGCTT	TGGAAATGAA	TTGCATATTC	ACATGTATTT	
			SUE	STITUT	E SHEET	(Rule 26))			

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ATTTA	ATTTCTG2	ATACACAA	ACCACTAG	AGGAAGAT	TTTTCTGCCT	GAAGGTTA	GGACCGGA	TTGCCTGC	GTGGCCGATT
TTGTTAAAGC	GCCAACTGGC	AGCAAAAATG	CAGATGGCTG	GTTTCTGGCG		ATTGAAATCA	AAGTAACTAA	AGATATAAAA	ATGCCCACAT
	GCTGTGCCAA	AAACTGCTAA	TCTGCCTAGG	ттестевеет		CAAACGGGCA	AGGACATGAA	ATTTATCCCC	
TGAATGACTA	AAAATCACTT	GAAAACGTTA	AGCTTTATTG	GGGTAATTGG	AGATCCTGGC	ATGGTTGATC	TGGAAATAAA	TGCATGCGCA	TGAGGGGCAA
CATCCCCAGA	AGCAGCGAAC	ACAAAGTGAG	AGAAAAATTG	GTCACGTCCA	TCGGTCCACA	ACTGGGTCTG	AATGCTTTTC	CTTTCTCTCC	ACCCTCTAAA TGAGGGGCAA GTGGCTAATT
ATTCTATGTA	ACCCACTTCC	TGATAAAACC	ATGGAGAAGG	GGGCCTCGGC	ACGCTTCAGC	CCTCTCCATG	TTTACCTTAA	TCCTAGCCGT	TGATAATTAT
	ATTCTATGTA CATCCCCAGA TGAATGACTA GTTAAAGGTA TTGTTAAAGC ATTTTAAATG	CCCAGA TGAATGACTA GTTAAAGGTA GCGAAC AAAATCACTT GCTGTGCCAA	CCCAGA TGAATGACTA GTTAAAGGTA GCGAAC AAAATCACTT GCTGTGCCAA AGTGAG GAAAACGTTA AAACTGCTAA	CCCAGA TGAATGACTA GTTAAAGGTA GCGAAC AAAATCACTT GCTGTGCCAA AGTGAG GAAAACGTTA AAACTGCTAA AAATTG AGCTTTATTG TCTGCCTAGG	ATTCTATGTA CATCCCCAGA TGAATGACTA GTTAAAGGTA TTGTTAAAGC ATTTTAAATG ACCCACTTCC AGCAGCGAAC AAAATCACTT GCTGTGCCAA GCCAACTGGC ATTTCTGAGA TGATAAAACC ACAAAGTGAG GAAAACGTTA AAACTGCTAA AGCAAAAATG ATACACAATA ATGGAGAAGG AGAAAAATTG AGCTTTATTG TCTGCCTAGG CAGATGGCTG ACCACTAGGT GGGCCTCGGC GTCACGTCCA GGGTAATTGG TTGCTGGGGT GTTTCTGGCG AGGAAGATTC	ATTCTATGTA CATCCCCAGA TGAATGACTA GTTAAAGGTA TTGTTAAAGC ATTTTAA ACCCACTTCC AGCAGCGAAC AAAATCACTT GCTGTGCCAA GCCAACTGGC ATTTCTG TGATAAAACC ACAAAGTGAG GAAAACGTTA AAACTGCTAA AGCAAAAATG ATACACA ATGGAGAAGG AGAAAAATTG AGCTTTATTG TCTGCCTAGG CAGATGGCTG ACCACTA GGGCCTCGGC GTCACGTCCA GGGTAATTGG TTGCTGGGGT GTTTCTGGCG AGGAAGA ACGCTTCAGC TCGGTCCACA AGATCCTGGC TCATTCTTTC CTAGATTCCA TTTTCTG	ACCCACTTCC AGCAGCGAAC AAAATCACTT GCTGTGCCAA GCCAACTGGC ATTTCTGAGA TGATAAAACC ACAAAGTGAG GAAAACGTTA AAACTGCTAA AGCAAAAATG ATACACAATA ATGGAGAAGG AGAAAAATTG TCTGCCTAGG CAGATGGCTG ACCACTAGGT GGCCCTCGGC GTCACGTCCA GGGTAATTGG TTGCTGGGGT GTTTCTGGCG AGGAAGATTC GCCCTCCAGC TCGGTCCACA AGATCCTGGC TCATTCTTTC CTAGATTCCA TTTTCTGCCT CCTCTCCATG ACTGGGTCTG ATGGTTGATC CAAACGGCA ATTGAAATCA GAAGGTTACC	ATTCTATGTA CATCCCCAGA TGAATGACTA GTTAAAGGTA TTGTTAAAGC ATTTTAAATG ACCCACTTCC AGCAGCGAAC AAAATCACTT GCTGTGCCAA GCCAACTGGC ATTTCTGAGA TGATAAAACC ACAAAGTGAG GAAAACGTTA AAACTGCTAA AGCAAAAATG ATACACAATA ATGGAGAAGG AGAAAAATTG AGCTTTATTG TCTGCCTAGG CAGATGGCTG ACCACTAGGT GGGCCTCGGC GTCACGTCCA GGGTAATTGG TTGCTGGGGT GTTTCTGGCG AGGAAGATTC GCGCTTCAGC TCGGTCCACA AGATCCTGGC TCATTCTTTC CTAGATTCCA TTTACCTTAA AATGCTTTTC TGGAAATAAA AGGACATGAA AAGTAACTAA GGACCGGATT	ATTCTATGTA CATCCCCAGA TGAATGACTA GTTAAAGGTA TTGTTAAAGC ATTTTAAATG ACCCACTTCC AGCAGCGAAC AAAATCACTT GCTGTGCCAA GCCAACTGGC ATTTCTGAGA TGATAAAACC ACAAAGTGAG GAAAACGTTA AAACTGCTAA AGCAAAAATG ATACACAATA ATGGAGAAGG AGAAAAATTG AGCTTTATTG TCTGCCTAGG CAGATGGCTG ACCACTAGGT GGGCCTCGGC GTCACGTCCA GGGTAATTGG TTGCTGGGGT GTTTCTGGCG AGGAAGATTC ACGCTTCAGC TCGGTCCACA AGATCCTGGC TCATTCTTTC CTAGATTCCA TTTTCTGCCT TTTACCTTAA AATGCTTTTC TGGAAATAAA AGGACATGAA AAGTAACTAA GGACCGGATTT TCCTAGCCGT CTTTCTCTCC TGCATGCGA ATTTATCCCC AGATATAAAA TTGCCTGCTT

TGCACTCAT	TAATTGTCA	GCATAAGTG	AGCGGGAAG	GTTGCCTGG	AACTGGTTC	GGATGGATCA	TGAGGCATT	ACAGCAATG	TTGCCCCAG	TCATTTATT
ATGTGCTCAA TTATTTGTGC ACATGAATAA TTGCACTCAT	GGAAAATAGC GCCCTCCTTT CAAATCCTCG TGCTTGGAGT GGCTGATGGA GTAATTGTCA	GCACTTGGTG GGGAGGGAAA GAGTATCAGA TACCAGGAAA CGCATAAGTG	ACCAGAGCTC GCAGATGTTC ACTGCCACAA ATGGCCTTAG GAGCCAGAGA GAGCGGGAAG	CTGCTTCTGA AGTTGCCTGG	GCAGCTCATG TGCGGTGACC TTGGGCAAGT CATTAACTTT CCTTCAGGTC TAACTGGTTC	CACTATCGTG G	GACTATTTAA AAGGATTTAC AATCTGCTTG GGTAAAAGCT TTACATAAAT ATGAGGCATT	TCCAATTATG AAGGAAGGGT AATGACCCTC CACAGCAATG	CAGGACTCCT GGTTTGGAGG GAGGGAAAGT TTGAGAAGGA CAGGAAGCTT GTTGCCCCAG	TCTACTGAGG TACCAGAAA TGTCATGTGG TCATACAGAA TTCATTTATT
TTATTTGTGC	TGCTTGGAGT	GAGTATCAGA	ATGGCCTTAG	CAGCCTGTGA GTTAGGAAGC	CATTAACTTT	CAATTCCCAT	GGTAAAAGCT	AAGGAAGGGT	TTGAGAAGGA	TGTCATGTGG
	CAAATCCTCG	GGGAGGGAAA	ACTGCCACAA		TTGGGCAAGT	TAATAACGCC	AATCTGCTTG	TCCAATTATG	GAGGGAAAGT	TACCAGAAAA
TTAGCCAATT	GCCCTCCTTT		GCAGATGTTC	GACCACAGGA TGGAACGGGC	TGCGGTGACC	TGCATACACA ATGAGGATGG	AAGGATTTAC	TTGGTACATC	GGTTTGGAGG	TCTACTGAGG
GCACTCCCCA	GGAAAATAGC	CACTGGAAAT	ACCAGAGCTC	GACCACAGGA	GCAGCTCATG	TGCATACACA	GACTATTTAA	ATCATGTCGC	CAGGACTCCT	CACTGATGTT
			SUI	BSTITUT	E SHEE	T (Rule 2	6)			

FIGURE 6 (69)

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CTGCAAACTC CACCTCCCAG GTTCAAGCGA TTCTCATGCC TCAGCCCCCT CAGTAGCTGG CGCACCACCA TGCCCGGCTA ATTTTTGTAT TTTTTGTTCG GGACACAGAT CATTCAACAA ACATCTGTCA ATTGTTACAC TGTCCTGAGA ATTTGGAAAA ATGATGAAAG TTTGAGACGG AGTCTTGCTC TGTCATCCAG GCTGGAGTGC AGTGGCATGA TCTCCGGTCA GGTGATCCGC CTGCCTCGGC CCACTGTGCC CAGCCAGAAC TGTGGTTTTA TAAAAAGTGG TATATGTCAC AGTGTCGGGT GGGGCTAAGA GGCACATTGC GGGAAATTTT ATCTCAAGTC TATGAAATCT GATTGCCAGG TACATTCGAT GGCAATGAGT CTTATAATGT TTTTGTTGTT GTTGTTGCTG TGGTTGTTGT CATTGGCCCG GGCCCCTGTT GGCCAGGCTG GTCTCGAACT CCTGATCTCT GTCACTGGCA TGCAAATAGT TTGGTTACCT TCATTTACCT AAGAACTGTG GCTGTGATTA CAGGCGTGAG ACTCAGTCCT GCCTTAGGAG TACTCTGACC TGTGCTGATT TTCACGGTTT TTCACATGTT ATTACAGGCG ATGACAATGC GGCATGCATT CTCCCAAAGT

FIGURE 6 (70)

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	FIGURE 6 (71)					
	GTGGCCCACT	GTGGCCCACT GGAGAGGAGA CAGCTATGGC TGGAGTGATT CTCAAACTTC AGAATGTCTA	CAGCTATGGC	TGGAGTGATT	CTCAAACTTC	AGAATGTCTA
	AAATCATCAC	AAATCATCAC ATGGACAACT	TATTAAGGAA	TATTAAGGAA AGCAAATGCC	TGGGCTCCAT	CCTCAGAGAG
	TCTCATTCAC	TCTCATTCAC TGGGTCAGGA TAGAGCCCAG GAATCTTTAC CTTAAAGAAC CATCCCACCT	TAGAGCCCAG	GAATCTTTAC	CTTAAAGAAC	CATCCCACCT
0	CCCACCTCAT	CCCACCTCAT ATGATCCTTA TGCAGGTGAT CTGGGGCCCCA CACTTTGAGA AATAGACTCA	TGCAGGTGAT	CTGGGGCCCA	CACTTTGAGA	AATAGACTCA
· Constant ver	GGTCAAAGTG	GGTCAAAGTG GCTCTAACTG	CATCTCATTT	CTTACCTGGC	CTTACCTGGC ATATCTAATA	GTAGAGAAGA
e emerc	AGACAATGCT	AGACAATGCT AAGATTTTTG	TTGGAGATCT	TTTGCTGGGA	TTGCTGCTTC	ATTCATTCAC
	TCATTTATTT	ATTTATTTAT	ATTTATTTAT TTATTTTGAA ACAGAGTCTC ACTTTGTCAC CCAGGCTGGA	ACAGAGTCTC	ACTTTGTCAC	CCAGGCTGGA
×	GGGCAGTGGC ACAA	ACAATCTGAG	CTCACTGCAG	CCTCAGGCTC	CTGGGTTCAA TCGATTCTCT	TCGATTCTCT
	TGCCTCAGCC	TGCCTCAGCC TCCCGAGTAG CTGGGATTAC AGTCATGCAC CACCACGCCC AACTAATTCT	CTGGGATTAC	AGTCATGCAC	CACCACGCCC	AACTAATTCT
	TGTATTTTTA	TGTATTTTTA GTAGTGACAG CGTTTCACCA TGTTAGCTAG ACTGGTCTCG AACTCCTGAC	CGTTTCACCA	TGTTAGCTAG	ACTGGTCTCG	AACTCCTGAC
	ATCAGGTAAT CTGC	CTGCCTGCCT	CGGCCTCTCA AAATTAGTAG	AAATTAGTAG	CTGCAATTAC	ACGTGTGAGC

FIGURE 6 (72)

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AATTGTGGGG CACACTTAGC AGCTTCCTTC TCTAATTTTT CTGTATTTTC AGGAGAACAA TGTAAATTAA AAACAATCAT AAGCATATGA GCACCTGCAC TTAGGGAATC TGCCGTGCCT GGCCTGCTGT TTCTTTAGT TGGGCCTCTT CTGTAATAGA GTGTGAGAAT TTTACACTGG TCAGATGTGG TTTAATAAAA ATGCCTTAAA AATTAACATT ATTATAAGAT GAATCCCATT AAATGGAGCT CACAGTGCAA AAATATTGAT CTGTTGTTAG ATGCTCTGAA GTTTCCAGAA GIGGIICCIC AAAAIGIIAG GAGTGGATGA GTGGCCTGGT GTATTTCATA ACATCTCCCA GGTCCAAATG CTAAAGCAAT TAGCAAAAT ATAAACTGCT TCTAGGTTTA AAAAGGACCC AGCACACAAT GGTTATCACA CACCTTTCTC CTCAGGTGAT GCGGCAATAC CAGGGCTGTG TAGGTGATTC CTTAAGGGAA ATTCTAATAG TGCAACAGTC TGCTTTGAAG CTGCCTGCTG TGCTTCAGTG TTTTTAAGCC CAGCTTTCTT AAATAGGAAG CTTCCAGCTC AAGGTTGGCA AAGCTAAACA TCTGACTTGC GGACTTTGGC TTTTAAAAAA TTTCTAATCT AGAATTGGTT

FIGURE 6 (73)

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CCATAATGTG TGCTGTCCTT TGTAATGTAG TCCACAGATC TCATAAACTG TCAGAAATAG GCGAAGCCAA ACTCTAGGCC CAAAGGCTCT AGCAACACAC TTTTGAGAAC CTTGGAGACG TGCTGAAAAG ATACCATGTG TACCGGAACC TTGCAGAGGT ATTTTGTTGG CATAAAAAA TITCCCAGAT CTACATCCTG AATCTTCATG AAGACAAGAT CCCCTAAACT TCCACTAACA CTAACCTCTG CTGGAGGGCA GATTTAGCTG CCAGCTGGGA AGAGCTCTGC CCTAGTCAAC ATTTTTATCT GTGGCTTTCA GATGAGAACA CTGGATGCTT ATCTGAAAAA AGCTCCTCAG GCTGGAGGGA GGGATTGGCT CTAACAAGAT GCAATGTGAT AAGAATAAAA AGTITIGGCT GAIGCGAGCT ICICCGCCIG CTAAAGIAGC CCAIICCAII IGGACGGCIC TAGAGGCTGG CATGTTCTTC TCCACGTTGT GTTAATGTAC TCCAGTTTCT TCCTGCCATG AATATTGATC ATCTATAGTA AAAATGGTTC TACTTTAATA CTACTGAGAA AAGATTTTCT CAGAGATTGT AAGGTCATCC ACTTCCCCTG TAAGGCCTGC GTCCCTCACT TACATCCCTA ATAACGTCCT

	FIGURE 6 (74)					
	AACTGGCATG	CCCTGGCTCC	TCCTACCTTC	CCCACTTTAA	CCCACTTTAA GTCTTCCCTC CCTCCTTCTG	CCTCCTTCTG
	ACCTTCCCAT TCCA	TCCAGCCACA	CTGGCCTTTT	GTCTGGTCCT	AACAAACCAT	GCCTTTCCTG
	CCTCCAAGCC CTAC	CTACACCTGC	TATCCATCCC	TCTGTCTGAG	TCTGTCTGAG AGACACTCCC ACCCCTTCAC	ACCCCTTCAC
CI TO	AAAGCCTGTT TCTC	TCTCATCCTT	CCAGTTCAGA	TGTCTTCTCA	TGTCTTCTCA GCTTGCCTCA ACTGACCTCT	ACTGACCTCT
Contant term	TTCAGCTATT	CTCACTCTTT	GTACTCTGTT	CATTTCCTTC	CTGGCAGTCA	CCATAATTTA
CHEET	TCTTTATTTG AATC	AATCAATTTC	TTAGTTGTAT	TATTTAGTTA	TTTGCACACT	CTGTCTCTCT
(DJa 20)	GTGCCTTTCT TATT	CACTGC	AGGCTTTCTT	ATGTAAGTAA	ATGTAAGTAA TTTATTTACT TAAATTTTTA	TAAATTTTTA
	AAAATAATTT	CAACTTTTGG	CCGGGCACAG	TGGCTCACGC	CTGTAATCCC	AGCACTTTGG
	GAGGCCGAGG TGGG	TAGATC	AGCTGAGGTC	AGGAGTTCGA	AGGAGTTCGA GACCAGCCTG GCCAACATGG	GCCAACATGG
	TGAAATCCCA TCTC		TATTTA AAATACAAAA ACTAGCCGGG CGTGGTGGTA TGCACCTGTA	ACTAGCCGGG	CGTGGTGGTA	TGCACCTGTA
	ATCCCAGCTA	CTCGGGAGGT	TGAGGGAGGA	GAATCACTTG	AACCGGGGAG	GTGGAGGTTG

FIGURE 6 (75)

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	CAGTGAGCTG	AGATCACGCC	CAGTGAGCTG AGATCACGCC ATTGCACTCC AGCCTGGGGC ACGAGAGTGA GACTTCATCT	AGCCTGGGGC	ACGAGAGTGA	GACTTCATCT
	CAAAAAAACA	AAAAACAAAA	CAAAAAAACA AAAACAAAA AACCCCTGCT TTTCAGAGGG GCTGAACTAA TTTACATTCT	TTTCAGAGGG	GCTGAACTAA	TTTACATTCT
	CACCAATAGT	GTATAAGCAT	TCCCCTTTCT	CTACAGCCTC ACTAGCATTT	ACTAGCATTT	ACTTTTTAA
SUB	AAAACTTTTT	AATAATAGCC	AAAACTTTTT AATAATAGCC ATTCTGACTG GTATGAGATG GTATCTCCTT GTGGTTTTCA	GTATGAGATG	GTATCTCCTT	GTGGTTTTCA
STITUTE	CTTGCAATTC	TCTGATGATT	AGTGATATTG AGCATTGTTT	AGCATTGTTT	TATGTTTGTT	GGCTGTTCGT
E SHEET	ATGTCTTCTT	TTGAGAAGTG	ATGTCTTCTT TTGAGAAGTG TCTTTTCATA TATTCTGCCC ATTTTTTGAA TGGAGTTGTT	TATTCTGCCC	ATTTTTGAA	TGGAGTTGTT
(Rule 26)	TTGTGCTTGT	TGAATTAAGT	TCCTTATAGA	ттстасатат	TAGACTTTTG	TTGGATGCAT
)	AGTTTGTGAA	TATTTTCTCC	AGTTTGTGAA TATTTTCTCC CATCCTATAG TTCTGTTTAC TCTGTTGATA GTTCCTGTTT	TTCTGTTTAC	TCTGTTGATA	GTTCCTGTTT
	TGTTATGTTT	TGTTTTTTG	CTGTACAGAA GCTGTTTAAT	GCTGTTTAAT	CTAATTGGTC	CCACTTGTCA
	ATTTTTGTTT	TTGTTGCAAT	TTGTTGCAAT GGCTTTTGAA TTTTAATAAT AAATTCTTTC	TTTTAATAAT		CTAAGGCTGA
	TGCCCAGAAC	AGCATTTTCT	AGCATTTTCT AGGTTTTCTT	CTAGGATTCT	TATAGTTCAA AGTCTTATAT	AGTCTTATAT

FIGURE 6 (76)

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	TTAAGCTTTT	AATCCACCTC AAGTTAATTT	AAGTTAATTT	TTATATATAG	TTATATATAG TGAAATGCAG GGGTCCTGTT	GGGTCCTGTT
	TCATTCTTTT	GCATGTGGCC	TCATTCTTTT GCATGTGGCC AGCCAGCAAT CCCAGAACCA TTTATTGAAT AAGGAATCTT	CCCAGAACCA	TTTATTGAAT	AAGGAATCTT
	TTCCTCATTG		CTTATTTTGT CAACTTTGTC AAAGATCGGA TGACTGTAGG AGTGTGGCTT	AAAGATCGGA	TGACTGTAGG	AGTGTGGCTT
	TTTCTGGGTT	ATCTACTCTG	TTTCTGGGTT ATCTACTCTG TTACATTGGT CTATGTGTCT GTTTTTGTAT CAGTATCATG	CTATGTGTCT	GTTTTTGTAT	CAGTATCATG
vo omiere i	CTGTTTTTGT	TACTATGGTC	TCATAACATA	GTTTAAAGTT	GGATAATGTT	ATGCCTCTGC
	TTTGCTGTTT	TTGCTTAAGA		TATTGAGGCT	CTTTTTTCAC	TTCATATGAA
er out	TTTAGAATA	GTTTTTCTA	ATTCTTTGAA AAATGACCTT	AAATGACCTT	GGCAGTTTGA	TAGGAATAGC
26)	ATTGAATCTA	TAGATTGCTT	ATTGAATCTA TAGATTGCTT TGGGCAGTAT GCTATTTAA TGATATTGAT	GCTATTTAA	ТСАТАТТСАТ	TCTTCCTATC
	CATGAGCATG	CATGAGCATG GAATATTTT	CCATTTGTTT	GTGTCATCTA	CTATTTCCTT	TAGCAATGTT
	TTTTAGTTTT	CCTTGTAGAG	TTTTAGTTTT CCTTGTAGAG ATCCTCCTAG GTATTTCATT	GTATTTCATT	TTTTATGTGA CTATTTTAAA	CTATTTAAA
	TGGGATTGCA	TTCTTCATGT	TTCTTCATGT GGCTCTCAGC TTGAATGTTA	TTGAATGTTA	TTGGTGTATA GAAATGCTAC	GAAATGCTAC

FIGURE 6 (77)			
AGAGTTTTGT ACACTGATTC TGTATCCTGA AACCTTACTG		AAGTCATTTA	TCAGTTCTAG
GAGCCTTTGG CAAAGTCTGT AGTGTTTTCT AGGTATAGAA TCATATCATT	GGTATAGAA	тсататсатт	AGCAAAGAAA
GATAGTTTGA CTTCTTTT TCCTATTTGA ATGCCTTTTA		TTTCTTTCCC	TTGTCTGATT
GCTCTTCCAG TACTACGTTG AATAGGAGTG CT	TGAGAGTGA	CTGAGAGTGA GCATCCTTGT	CTTGTTCCAC
CTCTCAGGGG AAATGGTTCC AGCTTTTGCC CA	CATTCAATAT	GATGTTGGCC	ATGGGTTTGT
CACAGATGGC TCTTATTATT TTGAGGTGTA TT	TCCTTTGAT	TTCCTTTGAT GCCTAGTTTG TCAAAGGCCT	TCAAAGGCCT
TTATCATGAA GGGATGTTGG ATTTTATTGA AAGCTTTTTC		TGGGTCTTAT	TTGGTGAATT
GCATTTATTG AATTGTGCAT GTTGAGCCAA ACTTCCATCC		CAGGGATTAA	ACCTACTTAA
TCATGGTGTT AACTTTTTGA TGTGCTGCTG GA	GATTTGGTTT	GCTAATTTT	TTTTTTTT
TAAGATGGAG TCTCGCTCTG TCGCGCAGGC TGGAGTGCAG TGGTGTGATC	GGAGTGCAG	TGGTGTGATC	TTGGCTCACT
GCAAGCTCCA CCTCCCGAGT TCATGCCATT CT	CTCCTGCCTC	AGCCTCCCGA	GTAGCTGGGA

	FIGURE 6 (78)					
	CTACAGGCAC	CCGCTACCAT	CTACAGGCAC CCGCTACCAT ACCCAGCTAA	TTTTGTATT	TTTTAGTAGA GACAGGATTT	GACAGGATTT
	CACCATGTTA	CACCATGTTA GCCAGGATGG	TCTTGATCTC	CTGACCTCGT	GATCTGCCTG	CCTCAGCCTC
	CCAAAGTGGC	CCAAAGTGGC TAGTATTTT	TTAATTACTA	TTAATTACTA TTTTTTCTCA CCCTTGCTGC CATCTTATGA	CCCTTGCTGC	CATCTTATGA
CLIE	TTTTCTAGTA	TTTTGTTGAA		GATTTTTGCA TCTATTTTCA TCAGGGATAT		TGGCCTGTAA
ידו וידיסכ	TTTTCTTTT	TCATTTCATC	TTTACCACAT	TTTTGTATCA	GGTTCATACT	GGCTTCATAG
c cuert	AATGAGTTCA	AATGAGTTCA GGAATGGTCC	CTCCTCCTCG AATTTTCTCT	AATTTTCTCT	GTAGAATTAG	TACCAGCTCT
'(Rule 26	TTGTGTGTCT	GGGAGAAGTT	GTATGCCAAT	GTATGCCAAT AATTTAAATG CAGTTAATAT TTACTGGACA	CAGTTAATAT	TTACTGGACA
	ATTTCCTCCA	GATAATTGTA	TATGATTTTT	GGTCCACCCT	GAGTTGATAC	ATGTATTTTA
	ATTGTATCAT	GGTATGAAAA	ATTGTATCAT GGTATGAAAA GAGCAAGAGT	TATTTGGTCA CCTAGTCTTG		CCTATAGATG
	TTGCCTAATG	ATTCAAAGTA	GATATTTTGG	GATATTTTGG GAGCCTTAAC AGGTGCCGTG GACTAGGCAG	AGGTGCCGTG	GACTAGGCAG
	TTTTGTTTT	TTTTTTTT	GAGGGACAGA	GTCTCGTTAT	GCTGCGCAGG	GCTGGAGTGC

FIGURE 6 (79)

C TAATTTTGT	C TCGTGGCCTC	c accecaccce	T TCTCAGCCTG	G GCTCTCCAGG	C TTGAATGTCT	'G TAAGGAGACA	T AGCTATCAGA	C ACTTACTATG	CTGCATCATC CTCTTTGGAA AATGCTCTTC AGGTAACTGC CTAACAGACT GAGAAAATAA
CACGCCTGG	GGTGTTGAA	GGCGTGAGC	TGACCCGCT	TGAAGATAT	CACATTCGC	GTCAGAGCT	ACTGCCAAA	CTCTTGGGC	CTAACAGAC
CTCACGCCAC	TGGCCAGGCT	TGGGCTTACA	CCAACTCTTC	ATGTGGTCTC	TTAGGATTTA	TGGCCATTTG	TTGGACAAAG		AGGTAACTGC
GGACTACAGG	ŢTCACCATAT	CCCAATGTGC	TCCCAAATAT	TGTTCAGATT	TTCACCTGGT	CATCCCAACT	TGTGAACTGC	TTAGGTTTGA	AATGCTCTTC
CCAGTAGCTG	GAGATGGGGT	CGCCTCGGCT	ААТТТТАТАТ		TGGATAAGGA	GTAGACAGTC	CAGCCGCTGC	AACAGCTGAT	CTCTTTGGAA
ATCAGCCTCC	ATTTTAGTA	ATGATCCACC	GAGATTAGGC	GGTGTATCAG	GTTGACAATG	GTTGCACCAA	AGGAGGTGGG	CAGTGTTAAC	CTGCATCATC
	ATCAGCCTCC CCAGTAGCTG GGACTACAGG CTCACGCCAC CACGCCTGGC TAATTTTGT		ATCAGCCTCC CCAGTAGCTG GGACTACAGG CTCACGCCAC CACGCCTGGC TAATTTTTGT ATTTTTAGTA GAGATGGGGT TTCACCATAT TGGCCAGGCT GGTGTTGAAC TCGTGGCCTC ATGATCCACC CGCCTCGGCT CCCAATGTGC TGGGCTTACA GGCGTGAGCC ACCGCACCCG	ATCAGCCTCC CCAGTAGCTG GGACTACAGG CTCACGCCAC CACGCCTGGC TAATTTTTGT ATTTTTAGTA GAGATGGGGT TTCACCATAT TGGCCAGGCT GGTGTTGAAC TCGTGGCCTC ATGATCCACC CGCCTCGGCT CCCAATGTGC TGGGCTTACA GGCGTGAGCC ACCGCACCCG GAGATTAGGC AATTTTATAT TCCCAAATAT CCAACTCTTC TGACCCGCTT TCTCAGCCTG	ATCAGCCTCC CCAGTAGCTG GGACTACAGG CTCACGCCAC CACGCCTGGC TAATTTTTGT ATTTTTAGTA GAGATGGGGT TTCACCATAT TGGCCAGGCT GGTGTTGAAC TCGTGGCCTC ATGATCCACC CGCCTCGGCT CCCAATGTGC TGGGCTTACA GGCGTGAGCC ACCGCACCCG GAGATTAGGC AATTTTATAT TCCCAAATAT CCAACTCTTC TGACCCGCTT TCTCAGCCTG GGTGTATCAG GCACAAGGCC TGTTCAGATT ATGTGGTCTC TGAAGATATG GCTCTCCAGG	ATCAGCCTCC CCAGTAGCTG GGACTACAGG CTCACGCCAC CACGCCTGGC TAATTTTGT ATTTTTAGTA GAGATGGGGT TTCACCATAT TGGCCAGGCT GGTGTTGAAC TCGTGGCCTC ATGATCCACC CGCCTCGGCT CCCAATGTGC TGGGCTTACA GGCGTGAGCC ACCGCACCGG GAGATTAGGC AATTTTATAT TCCCAAATAT CCAACTCTTC TGACCCGCTT TCTCAGCCTG GGTGTATCAG GCACAAGGCC TGTTCAGATT ATGTGGTCTC TGAAGATATG GCTCTCCAGG GTTGACAATG TGGATAAGGA TTCACCTGGT TTAGGATTTA CACATTCGCC TTGAATGTCT			

CTTTATGCCT TTATCTTTGC ACAGCTGAAA GCCATGGCAG TAAAATAGAA AGGTTCCTGC TAAGCCCTGG CAAATGCAGC ACACACACAC ACACACAC ACACACACAC CCCTATTCAT TGCCAACAGT AATAGAGTTG AAAAGCCTCA ATCTGAGGAA GCTGTGCTGA CTAGCCTTGC TGTTGCTGCC TTCCAGGAGC TGGGTGATGG GCAATAATGA GCAGAGCCAC GTGAAGGAAA GATGGGTGAA GAAATGTGTG CTGGCTGCAC TGACCATGAA ACAAAGGATC TACCCCTCTA GTAACTGCCC AATGCTCACA GAGAAAAAG ACCCGGAAAG TCTGACTTCT CAGAGCTCAG TGTTTAGGTG CATTGCAGGG AACATTCATT TIGICICIGI CICCCCACCI CTCACAGCTT CTGAGCAAGA TTTTATATT TATICCATCC TICTCCACTC CCACCTGICT GICGLIGICI TTGTGAAAGG ATTTTTAAAT CTAAACGAAA TCTTGGAGAG GGAGACAATG TCCCCCAACA CTTCTTTACT TGGAGTCATG CAGAACTGGA AAGCAGTCCT CTTCTATCCC TCTTAATCAT **FIGURE 6 (80)**

TGATCGTGGC TCACTGCAAC CCCCTGCTCC TGGGCTCAAG TGATTCTCCT GACTCAGCCT CTCAAGTAGC TGGGATTACA GGCGCACGCC CCCATGCCTG GTGCTAAACA CTTTACCATA TGATGACATC TTTTTCTCAC AGGTATCAAA TTTTTTGAGA TGGAGTCTCG CTCTGTCACC GTACTTTTAA TAGAGACCAG GTTTCACCAT GTTGGCCAGG CTGGTCTCAA CATTTATTCC TGCACAGATA CATAATATG GACACGGGCC ATGGTGGCCA GCATTCTTGC TCTTGACAAT GGTGAAGGGA AGGGTTGTAG GTCATGGCTA TGCTCTCAGA ATTATAATGG AAAGAAACAG CTCCTGAGTG TTTACTATGA TAGCTACAAT CTTTGGGCCC CTGCAAACAC AATAATGTGT TATTCATTGT GTAACTGTTC TGAAATTATA ACTTGCCAGA AGTTCAGAAG GACCTAGTGC TCAAATCCTA CATATTGCTA CAAACTGTAT CCCTGAGGCA ACTACTTTTG AGGTATTAGA GGAAATTCGT AAGATTGAGC AAACAATAGG ACATACCGGA TGCAATAGCA CATATAAAGT GCTAATTTTT CAGACTGGAG TACTCCTTTG ATTCTCTTCT AAAATAAAA GCCAAGGGCT **FIGURE 6 (81)**

TCTTGGAAAC ACCTGTAGTA CATCCTTGGC TAAGGTTAGC CCCAACAGAG GIGACCACAC GIGGIGIICA IIGAAGGCIG GACIAACAAC ICCAGCCICI CCGCCAICAC AGAGTGATGA CTGCCTTCCC TGAAGCAAAG CTTCTGGTTC AAGGAAAGGC CAGTAAGTGA TGTGCTCTCT GGGACTCAAA AAGCTGCACT CTTTGGGGGA AGGATAGCCA GGTAAAAGTG GCCCAGGTAA AGAGGGCCTG GTACACCTGG TTCTGCAAGA TGGTAGACAC AAAAATGAGA GCTACATTTG GAGCTTATGT GCCCCTAACT CTGTACATAA CCTGCAAGAT CTAATTACTA TAGAAAAGGC TACTAAAAAG ACATCAGGAA AGGGCCTGTG ACATCTGAGG GAAGTGGTTG ACTCCTGACC TCAAGTGATC CACCTGCCTC GGCCTTCCAA AGTGCTGGCA TTACAGCTGT GAGCCACTGC ACCCGGCCCA TATAAAGTAC TACTAATGTA ACAGGGTGCT AGTCCAGACA TTGTATACAT GTTAGATGAT CAGGCCTCAA GAAAAGTATA AAGAGATCTT AGGGCTCTCC TCTTACAGAG AACCATTACA TTTGTGCCTT CATCCTAGAG ACAACTGGAA CTGCTCTTTG ATGATCAGAC **FIGURE 6 (82)**

FIGURE 6 (83)

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TGGCCACCAG GGGAGGAACA AACAACTCTG GACACGCCAA CTTTAAGAGC TGTAACATTC ACTGCGAAGG GGGTCTGCGG CTTCATTCTT GAAGTCAGCA AGACCAAGAA CCCACTGGAA CCCTCTCTGG GATGTTGGTT CGGGAAGAGG GGCATGGAGG AGTGCCTGCT TTAGATGGTC ATTCAGGAAC CCAGGCTGAT AGTGAGAGGT GAAGCCAGTT GGGCTTCTGG GCTAGGGGGG TAGCTAAAGG ATTGTAAATG CACCAATCAG CACTCTGTAA GTTCTTTGC TATGAGCTGT CAAACCCACT TCTGCGGCTT CACCTCTGAA GTCAGCGAGA CTATGAACCC ACTGGAAGGA AGAAACTCCA AACATCTGAA GGAAGAAACT CCAGACACAC CATCTTTAAG AGCTGTAACA AAATCTTGCT GCTGCTCACT CTTTGGGTCT GCACTATCTT TCCTGAAGTC AGTGAGACCA GAATAAAAGC AGCCAGCAGT GGCAAACTGC TCAGGTCCCC TTCCACGCTG TGGAAGCTTT GTGGGCAGGG CCAAATAAGG GTGGCTTCAT CTTTTGTGTC AATGGACCAA TCAGCAGGAT GTGAGGGTCT TCTTCACAAT AACACTCACC ACTTGGAGAA GACACATCTG CTCACTGCAA

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TAGGGGGGA	AATCAGA AAGCCATAAT TTTTGCCCAA AGCCCCATCT TAGGGGGGAC	TTTTGCCCAA	AAGCCATAAT	ACCAATCAGA	ACCCGGGCTC	
TTCTTTAGGC	GAATGAT TTCTAGTATA AACTCCAGGA CTCTATTCTC TTCTTTAGG	AACTCCAGGA	TTCTAGTATA	TAA	GTTTCTCCTA	
TGCTTTTCTA	CTGTCTCTGG	AAACCACTCC	CCACTTCTAA	TCTGTTCTCC AAGGCTAGTC CCACTTCTAA AAACCACTCC CTGTCTCTGG TGCTTTTCTA	TCTGTTCTCC	
TCCTCTTGTC	CCTGGGTCCT AATGCCTGGA AGACAAAACT TCCTCTTGTC	AATGCCTGGA	CCTGGGTCCT	ACTCTTGCTT	ATCTATCCTG	
CATCTATCCI	TCACAACTCT CGAAGTCATG TTGCCCAAGC GAGACTCACC CATCTATCCJ	TTGCCCAAGC	CGAAGTCATG	TCACAACTCT	GTGGCCATGA	Rule 26)
GGTTGACCCI	ACAGCAAGTT	TGGGGTCCCG	CATTCAGCTC	AGAGGAAAGC CATTCAGCTC TGGGGTCCCG ACAGCAAGTT GGTTGACCCI	GGGTCAACAT	SHEET (
GCTGAGACGA	GTACTTCTGG	CACATTTCCT	GTTTGCCTGG AACCAGCTTC CACATTTCCT	GTTTGCCTGG	GGGAGCGTTG	STITUTE
CTTTGGAGTI	ACCCCCAACT	CTCTCTAATA	TGGGAAAGGG	GACACGGGTG TCAGACTTTC TGGGAAAGGG CTCTCTAATA ACCCCCAACT CTTTGGAGTI	GACACGGGTG	SUBS
AGAAACTAAA	TAGCATGGCT GCCAGACTTA AGAAACTAAA	TAGCATGGCT	TAAAAGCGAC	GTCAGCCAGT	TTGGGCACCT	
GGGCTAAATA	TATTCTGTCC TATTTTCCT TAGAATTCGG GGGCTAAATA	TATTTTCCT		CATCAACCCC TTTCACTTGT	CATCAACCCC	
TGGTGAGTAC	CCGGACACAT TTTGGTGACC CAGATGGGAC TATCACCAAG TGGTGAGTAC	CAGATGGGAC	TTTGGTGACC		GGAAACAATT	

FIGURE 6 (85)

TATCTGGAAT TTTAGGATCC		AAGCAGGCCT	CTCCTCAGAC AAGCAGGCCT AACAAAAGCT ATTCCTGAAG	ATTCCTGAAG
CTAGGATATG GGGAGCCTCA GAAATGATAT CCTTCCTATT CAAGTGAGGA CAAAAGGCAT	. GAAATGATAT	CCTTCCTATT	CAAGTGAGGA	CAAAAGGCAT
CACTCTTCCA ATTCTGGAGA TCCCTTCCCT CCCTCAGGGT ATGGCCCTCC ACTTCACTTT	, TCCCTTCCCT	CCCTCAGGGT	ATGGCCCTCC	ACTTCACTTT
TGGGGCATAA CGTCTTTATA GGACACGGGT AAAGTCCCAA TACTAACAGG AGAATGTTTA	GGACACGGGT	AAAGTCCCAA	TACTAACAGG	AGAATGTTTA
GGACTCTAAC AGGTTTTCAA GAATGTGTCG GTAAGGGCCA CTAAATCCGA TTTTTCTCGG	. GAATGTGTCG	GTAAGGGCCA	CTAAATCCGA	TTTTTCTCGG
TCCTCTTTGT GGTCTAGGAG GACAGGTAAG GGTGCAGGTT	GACAGGTAAG	GGTGCAGGTT	TTCAATAATG TGTTGGTAAG	TGTTGGTAAG
GGCCACTAAA TCTGACATTC CTTGGTCCTC CTTGTGGTCT AGGAGGAAAA CTAGTGTTTC	CTTGGTCCTC	CTTGTGGTCT	AGGAGGAAAA	CTAGTGTTTC
TGCTGCTGCA TCAGTGAGCG CAACTATTCC AATCAACAGG GTCCAGGGAC CATTGTGGGT	; CAACTATTCC	AATCAACAGG	GTCCAGGGAC	CATTGTGGGT
TCTTGGGCAA GAGGTGTTTC TGCTGCTGCA TTGGTGGGCT CAACTATTCC AATCAGCAGG	: TGCTGCTGCA	TTGGTGGGCT	CAACTATTCC	AATCAGCAGG
GTCCAGTGAC CTTTGCGGGT	TCTTGGGTCG	GGGGGTGGGG	TCTTGGGTCG GGGGGTGGGG GGAACAAACA GACCAAAACT	GACCAAAACT
GGGGCAGTT TTGTCTTTCA	TTGTCTTTCA GATGGGAAAC ACTCAGGCAC CAACAGGCTC ACCCTTGAAA	ACTCAGGCAC	CAACAGGCTC	ACCCTTGAAA

ATAGGTATAC TCATGCTATT CCCGAGAGTT	GATGATCCTG ATAGGTATAC TGGAGAGATG TCATGCTATT TTAGCCACAG CCCGAGAGTT	GAAGCTTTCA CAATCTCACT GAATGTGGCT	CAGACCAGGG GGCAAACCTT TTAATTTAAA	TGATTTAAAG CAGATCAAGG CAGACCAGGG GAAGCTTTCA GATGATCCTG ATAGGTATAC AGATGTCCTA CAGGGTCTAG GGCAAACCTT CAATCTCACT TGGAGAGATG TCATGCTATT GTTAGATCAA ACCCTGGCCT TTAATTTAAA GAATGTGGCT TTAGCCACAG CCCGAGAGTT	TGATTTAAAG AGATGTCCTA GTTAGATCAA
TCTCCCTCTC	CATGTCCCCT	AACCCAGGTA	AATTTGGCCC	AAGCTGTAGC GGGGAGGGG AATTTGGCCC AACCCAGGTA CATGTCCCCT	AAGCTGTAGC
TGTCCCCTTC	CTATCGGTTA	AACCCCTGGG	GGACCACAAA	CAAGCAAAGA AATCTCCAAA GGACCACAAA AACCCCTGGG CTATCGGTTA TGTCCCCTTC	CAAGCAAAGA
CAGAAGGAAA	TCTCCCCACC CAGAAGGAAA	TTAATGATAA GCCTCCTCTA		CCCTATAGCT CCCCTTCCTA	CCCTATAGCT
ATCCTAGCTT	TTACCCCCAT	GAACTCTCAC	CCCACAAGAA	GCAAAACTTA CAATTCACAT CCCACAAGAA GAACTCTCAC TTACCCCCAT ATCCTAGCTT	GCAAAACTTA
CCACAACTAT	AAAGGAAAAT CCACAACTAT	TCTTTTCATT	GTCCAAACTT	AATGGAGTGA AATACCTTAT	AATGGAGTGA
AAGGAAAGCA	TTTCTGTAAG	AGCTTGACCT	ACTATCCTGC	AAGGAAGTAT AAATTACAAT ACTATCCTGC AGCTTGACCT TTTCTGTAAG AAGGAAAGCA	AAGGAAGTAT
TGGCCACCTG	TGGGGAAAAA TGGCCACCTG	CTCTCTGA	TCCCAATATT	TATGGCCTGG	TATTCTGCAC
TGGCTCATTT	TGAAAAAGAG	CCGCAAACCC	CTAATTTGAC	TGTATCCTAA GCCATTGGGA CTAATTTGAC CCGCAAACCC TGAAAAAGAG TGGCTCATTT	TGTATCCTAA

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FIGURE 6 (86)

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	FIGURE 6 (87)					
	TGGAGATACC	TGGTATCTTA	TGGAGATACC TGGTATCTTA GTCAAGTAAA TGATAGAATG ACAGCTGGGG AAAGGGACAA	TGATAGAATG	ACAGCTGGGG	AAAGGGACAA
	AGTCTCTCCC	GGTCAGCAAG	AGTCTCTCC GGTCAGCAAG CCATCCCTAG TGTGGATCCC CACTGGGACC	TGTGGATCCC	CACTGGGACC	TAGACTCAGA
	TCATTGGGAC	TGGAGTCGCA	TCATTGGGAC TGGAGTCGCA AACATCTGTT GACCTGTGTT CTAGAAAGAC TAAGGAGAAI	GACCTGTGTT	CTAGAAAGAC	TAAGGAGAAT
SUF	TAGGAAAGAG	CCTATGAATT	ATTCAATGAT	ATTCAATGAT GTCCACCATA ACTCAGGAAA AGGAAGAAAG	ACTCAGGAAA	AGGAAGAAAG
STITUT	TCTTGCCTTC	CTTGAGTGGC	TACAGGAGCC	TTAAGAAAT ACACTCCCCT GTCACCCAAC	ACACTCCCCT	GTCACCCAAC
E SHEET	TCACTCAAGG	GTTAATTGAT	TCACTCAAGG GTTAATTGAT TCTAAAGAT ATGTTTATTA CTCAATCAGC TGCAGATATC	ATGTTTATTA	CTCAATCAGC	TGCAGATATC
'(Rule 26	AGGAGAAAGC	TCCCAAAAGC	AAGCCCTTGG	AAGCCCTTGG CCCTGAACAA AATTTGGAGG	AATTTGGAGG	CATTATTAAA
3	CCTGGCAACC	CCTGGCAACC TTGGTGTTCT	ATAATAGGGG CCAAGAGGAG CAGGCCAAAA TGGAAAAGCG	CCAAGAGGAG	CAGGCCAAAA	TGGAAAAGCG
	AGATAAGAGA	AAGGCCACAG	AGATAAGAGA AAGGCCACAG CCTTAGTCAT GGCCCTCAGA CAAACAAACC TTGGTGGTTC	GGCCCTCAGA	CAAACAAACC	TTGGTGGTTC
	AGAGAGGACA GAA	GAAAATGGAG	CAGGCCAATC ACCCAGTAGG GCTTGTTGTC AGTGTGGTTT	ACCCAGTAGG	GCTTGTTGTC	AGTGTGGTTT
	GCAAGGACAG	TTTAAAAAAG		ATTGTCCTAT GAGAAACAAG CTGCCCCTC	CTGCCCCCTC	ACCCATGTCC

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ACTATCGCTG AAGCAATCAC TGGAAGCCAC ACTGCCCCAA AGGACAAAGA TTATCTGGGC TAGCGCCAGC GGAAATTGAC CAAGGTCTGT TACCATCCGA GGAATCCTGG GACAGCCTAT ATCCAGGTAT TTCTCCCACC TAATCCTACA CCCCCATTAA GAAACTATGG AGTTATTGCA CACAGTGCAA AAACCCAAGG AGGTGGCGGT GGCAGAGGCA GGGAAAGACA AGCAGAAAGG AAAGAGAGAA AGAGCAGAAA GTGAGAGAGA AAGAGAGATA GGAAGTGATA GCAAAGAGGG AGTCAGAAAG AAAAGAGAGA GGAGAGAGAG TICTACTEGA CACTEGIECE ECTITICTCAG IGITAACCIC CIGICCTEGA CAGCIGICCI GGAGAGGGA GAACTGCAGC ATAAGTGGCT TGCTCAGGGT TTGAGGGCCA TATGCTTACC TCTGGGTGAA CAAGCAGATG ATCCAACCAC AGGACTGAGG TAACTGGGAG ACTTTGCTAC AGATAGTAAG GCGATATGGA AAGAAAGGGA ATTCCTAACT GCCCTGGGTA CATTTAACCA AAAAGGGGAA ACCTCACTGA CGAAGCCATC TCATGTCATC CAGAAGCCCC TCCTCAGTTG ATATCACAAG TGCCCATGCT CTTACATTGC

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FIGURE 6 (88)

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109/285	120/285
110/285	121/285
111/285	122/285
112/285	123/285
113/285	124/285
114/285	125/285

GTAAAGTTTG	TTAATAGCAA AGAAAATTAA AATCTCAAAC TTACGAGGTT TTCAAGTAAA GTAAAGTTTG	TTACGAGGTT	AATCTCAAAC	AGAAAATTAA	TTAATAGCAA
CGAGGTTTTA	AGAATCAGGA AGGAGCCATC TATACCAATT CTAAGTTAAT ATGGACTGAA CGAGGTTTTA	CTAAGTTAAT	TATACCAATT	AGGAGCCATC	AGAATCAGGA
AAGTACTTAC	TTGCACTCAG CTAAACCTTA AAGTACTTAC	TTGCACTCAG	TGTTTGCTGT	ACGTTGAAGC	GTCTGCTCAA ACGT
GAAATAAGTG	TTCAGTAAGT GATAAGGAAA CTCTTATAGA AGCAGAGTTA GGAAAATTGC GAAATAAGTG	AGCAGAGTTA	CTCTTATAGA	GATAAGGAAA	TTCAGTAAGT
ACAATGGGTA	GGTTCCTCCC AGGTGATTAA GGAAAAAGAC ACAATGGGTA	AGGTGATTAA	GGTTCCTCCC	GATGATAGAT	TTCAGGACAG GATG
GAGAACTGCC	TCCTAA CAGGGATCTA ATCTTAGGTC GACCAGACTG GAGAACTGCC	ATCTTAGGTC	CAGGGATCTA	GGTTTCCTAA	TAACACAGCA GGTT
CCAAAATCCT	GCCACT GAGGCCACTG ACAACCCGTA GCCTTCTTAT CCAAAATCCT	ACAACCCGTA	GAGGCCACTG	AAAAGCCACT	TTATTAGCCC AAAA
TAAACAAGGG	CTATAA TACTCCCAAT ACCACCTTGT TGTTCAGTGT TAAACAAGGG	ACCACCTTGT	TACTCCCAAT	AACCCTATAA	CTTTTCTGTT AACC
AATTGAAGGC	TCCTTTAAAA GCCAGGTTAA ATTTAAAACC TATAATTGAT AATTGAAGGC	ATTTAAAACC	GCCAGGTTAA	TCCTTTAAAA	TGTACCCTAT
GAAAAAACAG	AGAGGAAGAG ACAAAGAAGG AGTCAAAGAG AGGGAAAGAG AAGTAGTAAA GAAAAAACAG	AGGGAAAGAG	AGTCAAAGAG	ACAAAGAAGG	AGAGGAAGAG
AGAAGCAAAG	AGGGGGAAAG ACAGAGAG ACAGAGGAAG AGACAGAGAG ACAGAAAGAG AGAAGCAAAG	AGACAGAGAG	ACAGAGGAAG	ACAGAGAGAG	AGGGGGAAAG

	FIGURE 6 (90)					
	GTAAAAGTTA	ACAGCGTAAC	ATGTATTATC	GTAAAAGTTA ACAGCGTAAC ATGTATTATC CTAGTACCAC ACATTCTCTC AAAGGATTTG	ACATTCTCTC	AAAGGATTTG
	CTCAGACAGT	TTGCAAAAA GAACGAAATC	GAACGAAATC	TGTCCTTACT	CTACAATCCC	AAATAGACTT
	TTGGCAGCAG	TGACTCTCCA	TTGGCAGCAG TGACTCTCCA AAACCGCTGA GGCCTAGACT	GGCCTAGACT	CTCATGTTGA GAAAGGAAGA	GAAAGGAAGA
SUI	TTCTGCACTT	CTTAGGGGTA	GAGTGTTGTT	CTTAGGGGTA GAGTGTTGTT TTTATACTAA CCAGTCAGGG ATAGTATGAG	CCAGTCAGGG	ATAGTATGAG
BSTITUT	ATACCACCCA	ATACCACCCA GTGTTTACAG	GAAAAGGCTT	CTGAAATCAG	CTGAAATCAG ACAATGCCTT TCAAACTCTT	TCAAACTCTT
E SHEET	ATACCAACCT	CTGGAGTTGG	ATACCAACCT CTGGAGTTGG GCGACATGGC	TTCTCCCCTT	TCTAGGTCCT	GTGACAGCCA
Γ (Rulc 26	TCTTGCTAAT	AGTCGCATTT	TCTTGCTAAT AGTCGCATTT GGGCCCTGTA TTTTTAACCT	TTTTAACCT	CTTGGTCAAA TTTGTTTCCT	TTTGTTTCCT
5)	CTAGGATCGA	GGCCATCAAG	CTACAGATGA	CTACAGATGA TCTTACAAAT GTAACCCCAA ATGAGCTCAA	GTAACCCCAA	ATGAGCTCAA
	CTAACAACTT	CTGCTGAGGA CCCCTGGACC	CCCCTGGACC	GACCCGCTGG	CCCTTTCAAT	GGCCTAAAGA
	GCTCCCCTCT	GGAGGACACT	ACCACTGCAG	GCTCCCCTCT GGAGGACACT ACCACTGCAG GGCCCCTTCT TCACCCCTAT CCAGCAGGAA	TCACCCCTAT	CCAGCAGGAA
	GTAGCTACAG	CGGTCATCGC	CAAATCCCAA	CAAATCCCAA CAGCAGCTGG GGTGTCCTGT TTGGAGGGGG	GGTGTCCTGT	TTGGAGGGGG

FIGURE 6 (91)

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CTGTATTTT	CAAGACCAAG AACCCACCGG AAGGAACAAA TTCCAGACAC AGTAGGAAAT CTGTATTTTT	TTCCAGACAC	AAGGAACAAA	AACCCACCGG	CAAGACCAAG
TTGAAGTCAG	GGCTTCATTC	AAGGGTCTGT	CACTCACCGC	ACCATCTTTC AGAGCTGTAA CACTCACCGC AAGGGTCTGT GGCTTCATTC	ACCATCTTTC
CTCCAGACAC	CCACCAGAAG GAAGAAACTC TGGACACACC TGAATATCTG AAGGAACAAA CTCCAGACAC	TGAATATCTG	TGGACACACC	GAAGAAACTC	CCACCAGAAG
GACCACAAAC	TTCACTCCTG AAGTCAGTGA GACCACAAAC	TTCACTCCTG	GCTCTGCAGC	GCTGTAACAC TCACTGCGAA GCTCTGCAGC	GCTGTAACAC
GCCTTTAAGA	GTCAACAGAC CACGAACCCA CTGGAAGGAA CAAAGAACTC CCGATGTGCT GCCTTTAAGA	CAAAGAACTC	CTGGAAGGAA	CACGAACCCA	GTCAACAGAC
CATTCCTGAA	TCTGTGGCTT	ACTGCGAGGG	TGTAACACTC	TCCACACTAC CTTTATGAGC	TCCACACTAC
ATTCTTTGTG	TGCTCTTCAC AATAAATCTT GCTGCTGCTC ATTCTTTGTG	AATAAATCTT		TTTGTTCTTT	CTGTGGAAGC TTTG
CCCTTCCACA	AGGGAGTAAA AACTGGCCAC CCGAGCCAGC AGTGGCAACC CACTCGGGTC CCCTTCCACA	AGTGGCAACC	CCGAGCCAGC	AACTGGCCAC	AGGGAGTAAA
GGGTCAAATA	TAAAATGGAC CAATCAGCAG GATGTGGGCG GGGTCAAATA	CAATCAGCAG		CAGCACTCTG	ATGCACCAAT CAGC
AGGATTGTAA	TCTAGCTAAA GGATTGTAAA TGCACCAATC AGCACTCTGT GTCTAGCTAA AGGATTGTAA	AGCACTCTGT	TGCACCAATC	GGATTGTAAA	TCTAGCTAAA
AACTTTTGTG	GCCAGC TGGGCTTCTG GGTCAGGTGG GGACTTGGAG AACTTTTGTG	GGTCAGGTGG	TGGGCTTCTG	TGAA	GATTGAGAGG

GATCTGTGGC	GATCTGTGGC TTCCAGGGTT	ACTCCAGTCA	ACTCCAGTCA TTGAAGTCTC CATTGCAGCC TTAAGGAAAC	CATTGCAGCC	TTAAGGAAAC
AGAGAATGGT	TTGGAGGAGC	AGAGAATGGT TTGGAGGAGC ACATGTGGGA ATTGTTATGG ACCAGGCTTG AGATGCACAT	ATTGTTATGG	ACCAGGCTTG	AGATGCACAT
AGGGCATTTC	AGGGCATTTC TGATCAAACC		TAGCTGGAAG CAGGGCCAGG AAATATAATC	AAATATAATC	TAAGGAAGAC
AGTTTTTGTA	GACAGTAGTA	AGTTTTTGTA GACAGTAGTA GTCTTTGCAT CTGAGACATG TAGATTATCA AGCAATTAAT	CTGAGACATG	TAGATTATCA	AGCAATTAAT
TAGAAAAAAT	ATAGCCAGGT	TAGAAAAAT ATAGCCAGGT GCGATGGCTC ATGCCTGTAA TCCCAGCACT	ATGCCTGTAA	TCCCAGCACT	TTGGGAGGCC
AAGGGGTGTG	GATCACGAGG	AAGGGGTGTG GATCACGAGG TCAGGCGTTC GAGACCAGCC TGGCCAACAT GGTGAAACCC	GAGACCAGCC	TGGCCAACAT	GGTGAAACCC
CGTCTCTACT	ааааатасаа	CGTCTCTACT AAAATACAA AAATTAGCCT GGTGTGGTGG	GGTGTGGTGG	CACGCATCTG	TAATCCCAGT
ACTCAGGAGG	CTGAGGCAGG	ACTCAGGAGG CTGAGGCAGG GGAATCTCTT GAACTTGGGA GGCAGAGGTT GCAGTGAGCC	GAACTTGGGA	GGCAGAGGTT	GCAGTGAGCC
AAGATCACAC	AAGATCACAC CACAGCACTC CATCCTGGGT		GACAGAGCGA GACTCTGTCT	GACTCTGTCT	CAAAAAAAA
ААААААААА	GGAAAGGAAA	AAAAAAAAA GGAAAGGAAA ATATAATCAA GAATATTGAC AGGTAACATT	GAATATTGAC	AGGTAACATT	TATTCAACAC
TTACTATGCA	CCAGGCAATA	TTACTATGCA CCAGGCAATA CACTAAGTGT TTTACATGGA TTAACTCATT TAATCTTAAC	TTTACATGGA	TTAACTCATT	TAATCTTAAC

GTAAACTTAT ATTAATTAAT TCCATGCACA GATTTATCCA ACAGAAGGAA	CTACAGTGTA GTTCAGCGTA TAAAGAATAA TTATTTTAAG GTAAACTTAT AAATATAAAA TGAACACGTG TCAAAGATCT TATTTAATTT ATTAATTAAT GTAAGATGTT ACAGCCAGTT CAAAGGATAA TTCAAATAAA TCCATGCACA ATAAGGAATG CTGAAATGAA TTTAAAAGTA GATGTAAACT GATTTATCCA ATCAGTTGCA TTTCACATAA CAAAATTCAG TTGCTTTTCT ACAGAAGGAA	TAAAGAATAA TCAAAGGATAA TTTAAAAAGTA CAAAATTCAG	GTTCAGCGTA TGAACACGTG ACAGCCAGTT CTGAAATGAA TTTCACATAA	TCTGAAGCTA CTACAGTGTA GTTCAGCGTA AACCTCATGC AAATATAAAA TGAACACGTG GAGGGAACCT GTAAGATGTT ACAGCCAGTT TATGTAGGCA ATAAGGAATG CTGAAATGAA CAGAGAAATA ATCAGTTGCA TTTCACATAA	TCTGAAGCTA AACCTCATGC GAGGGAACCT TATGTAGGCA CAGAGAAATA
GTAAACTTAT	TAAAGAATAA TTATTTTAAG GTAAACTTAT	TAAAGAATAA	GTTCAGCGTA	TCTGAAGCTA CTACAGTGTA GTTCAGCGTA	TCTGAAGCTA
CAGCAGAGAG	GGTCAGGGAT ACGGGAGGGT CACGGCAAGG AGGGAAAGGA AACTGTACCA CAGCAGAGAG	AGGGAAAGGA	CACGGCAAGG	ACGGGAGGGT	GGTCAGGGAT
AGAAACTGGT	GACCTTGAAG GGTTAGAGGG ACTTCACCAA AGAAACTGGT	GGTTAGAGGG	GACCTTGAAG	GACACTTGGC AACTCTGTGG	GACACTTGGC
CAGAGAAGCT	GGGCAGTTGG GGATGGAAGG ATGGATGAAG AACAGCTTGA CAGAGAAGCT	ATGGATGAAG	GGATGGAAGG	GGGCAGTTGG	AGTCTGAGTT
GGAGGTACTG	GGTGTGAGAA ATGCTCTAAC AAGATGTGAG TCAGGGGTTG GGAGGTACTG	AAGATGTGAG	ATGCTCTAAC	GGTGTGAGAA	ACAGGAATCT
AGCAACTGTT	CAAGTAGAGA AATGGCCATG CTTGCATTCT CAGTTTTTGA AGCAACTGTT	CTTGCATTCT	AATGGCCATG	CAAGTAGAGA	ACAGAAAGGT
AAACTGAAGT	ATAGATAAGG AAACTGAAGT	TCTCCACTTT	GCTGTTATTA	AATAGCCCTA TGAAGTCAGT GCTGTTATTA	AATAGCCCTA

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FIGURE 6 (93)

FIGURE 6 (94)

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CTCAAACACA	CCAGGATGTT	ATAATACTGT	AATAAATGCC	TGGTAGAGTA	ACTCCTCAAG	AAAAAAAA	CTGAACGTTT	GATTAGAAGT	AGTGCTTATG	GCCTGTACCA
TATAAAATAA CTCAAACACA	ATGAAAGGCA GATATAACCC ACAATGGTAT GATAGATACA ATATCCACAT CCAGGATGTT	TTCCTGATAA GGGAGTGTCA ATAATACTGT	TTTAAGGGGT AATAAATGCC	GCATAC TGTGCAACAT GTCGGGGAAT CTCAAATTAT TGGTAGAGTA	GTGGAG CTTGTTAATA AATTCAAATT CCCAGACCCA ACTCCTCAAG	GGTCTAATAC AGTAGGTTTG GAGTAAAGCC TGAAAATCTG CAATTGTGCA AAAAAAAAA	TCTGATACAC TTTGAGAAGC ACTGGTGGAA CTAATAGTCA CTGAACGTTT	TTGAGCAGGG GAGAACCTG AGGACGTCTA TGTTGCAGCA GTGGAAACTT GATTAGAAGT	CTAATATTTG	ATGGGCCAGG GGCTGTGCTA GGCGCGTGGC ACACATTCAA TACGATGGAA GCCTGTACCA
TTTTCTACAA CTAACAGAAT	GATAGATACA	TTCCTGATAA	ATGGCAGGCA ATAAGACTGG ATGGATGGTT GGGGCCAGGT	GTCGGGGAAT	AATTCAAATT	TGAAAATCTG	ACTGGTGGAA	TGTTGCAGCA		ACACATTCAA
ттттстасаа	ACAATGGTAT	TTCACAAGTT	ATGGATGGTT	TGTGCAACAT	CTTGTTAATA	GAGTAAAGCC	TTTGAGAAGC	AGGACGTCTA	AAAAGAATGC	GGCGCGTGGC
САТТАССААТ	GATATAACCC	TTCAAAGTCT	ATAAGACTGG	ATGTGCATAC	ACTTGTGGAG	AGTAGGTTTG	TCTGATACAC	GAGAAACCTG	AGGAGAAGAT GCATGGTCTT AAAAGAATGC AAAATGATGG	GGCTGTGCTA
TTGTTTGCAT	ATGAAAGGCA	TTTTCTCAT TTCA	ATGGCAGGCA	ATGTAAAGGT ATGT	TGTAAGAAAC ACTT	GGTCTAATAC	CCCAGGTGAT	TTGAGCAGGG	AGGAGAAGAT	ATGGGCCAGG

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GTCAGTATTA	GTCAGTATTA GTGGGGTATC		TTTAAGAGTG ACCAGAATTA AGGGGGGTTT	AGGGGGGTTT	TCACCAAAGC
CTGAGGACTG	CTGAGGACTG AGCCTCCTCA TCCTAAATTC AGACACAATG CTGTACCTAT GCATTTGCCT	TCCTAAATTC	AGACACAATG	CTGTACCTAT	GCATTTGCCT
CCAGGCTGTT	CCAGGCTGTT CCTGGGCCTC	CAGGGACTGG	CCCAGGCTCC	TGATAAATAG GGACTCCCAA	GGACTCCCAA
CAACATAAAG	CAACATAAAG CCTGGATTTT GGAACTTCCT GAATGTTACT CAGGCTTTCT AGTAACTGTG	GGAACTTCCT	GAATGTTACT	CAGGCTTTCT	AGTAACTGTG
GAGATCTGAA	GAGATCTGAA TAATAACACA ATTCTAAGTT	ATTCTAAGTT	CCCCTACTCA	TAAAGCTGCT	CATCATTTAG
ATGGGGTAAA	ATGGGGTAAA GCACCTGAAA TACAATGAGC ATCACTATTT TCATTCATCC ATGAAATGAA	TACAATGAGC	ATCACTATTT	TCATTCATCC	ATGAAATGAA
CATTCCGGGG	CATTCCGGGG AGATCAGTAA	GTTGATGTAT	CACCCTTGAA CAGGGCAAAA TGAATACTCA	CAGGGCAAAA	TGAATACTCA
CCAGGAATAT		AAAAAGAAGG	CAAAGGGAAG	AATAGTGGGG	ATGGGGCAAA
AACTTTAAAT	AACTTTAAAT AGATTCCCCC AATCATAT	AATCATATAT	GGCAATTGAA GATAATTAAA	GATAATTAAA	TTATCATTT
AATTGAGTAA	AATTGAGTAA GTACTCATAG AGCCCTCACT ATTTGAAAAT GAACTGCCTC CTAATTGTTA	AGCCCTCACT	ATTTGAAAAT	GAACTGCCTC	CTAATTGTTA
TTGTGCAAAT	GTGATACATT	GTGATACATT AAACTTAAGC TATTTTAATA AAACATCCAT	ТАТТТТААТА	AAACATCCAT	TTTCGGAAGC

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FIGURE 6 (95)

FIGURE 6 (96)

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	TGTAGTAGGT	TCTCCCAGGT	CAGATTTGAT AAGCCATAAA GAACAAATGC CAACTCCTAT	AAGCCATAAA	GAACAAATGC	CAACTCCTAT
	TTTTCTATGG	TGCTGGGAAA	TTTTCTATGG TGCTGGGAAA TAAGAGAAA ATGTGTAATT CAAAGCAATC ATTTAATTT	ATGTGTAATT	CAAAGCAATC	ATTTAATTT
	ATCCAATAGC	TTGATTCTCC	TCTCTCTTCT	AGCCTTTTAG CTAAGCTGTT	CTAAGCTGTT	ACCAAGTAAC
SUB	CACACTAGTT GGCTTGAGTC	GGCTTGAGTC	TTACCACTGT	TTCCCTGACC	TTACCACTGT TTCCCTGACC CCACAGTGGA GAGACTGCAT	GAGACTGCAT
STITUTE	CTGTTAAAGA	CTGTTAAAGA GCAGTTATGT	AACCATGGCT	ATGCTGAGCT	ATGCTGAGCT GGGATTCCCA AGGCTTAGGT	AGGCTTAGGT
SHEET	TCTTTCTGTG	AATGACCTTC	TCTTTCTGTG AATGACCTTC ACCAAGACAC CTGAGGTCTG TGTGGAACCA CAGGCTTGTC	CTGAGGTCTG	TGTGGAACCA	CAGGCTTGTC
(Rule 26)	ATCTCTAAGG	CAGAGTTGAT	CAGAGTTGAT AATTCCATCT GTTTCTTGAG CCCACACTGA GAAAAAGATT	GTTTCTTGAG	CCCACACTGA	GAAAAAGATT
	ACATGACTGC	AGTTATTTGA	ACATGACTGC AGTTATTTGA ATGCCTCATG GAAAGACGTC	GAAAGACGTC	ТТАТАААТАТ	TATAATTAAT
	GTTATCATTA	AGTAATGCTT	CAATGCAGAT	CAATGCAGAT CTTCCAAGTA	TAAATATCAG CTGAGTAAGA	CTGAGTAAGA
	AGTCAATCTT	CCCTGAAGCA	AGTCAATCTT CCCTGAAGCA AAATTGAAAT TTGTAAATGC GATTTCTGGG AGCTTATTTT	TTGTAAATGC	GATTTCTGGG	AGCTTATTT
	GTAATACATG	ATTCCAGAGT	ATTCCAGAGT GTCCATAACA CACACAATTG TCTTTTTTCC CCTACATGGG	CACACAATTG	TCTTTTTCC	CCTACATGGG

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	CTATTTACAA	CAAAA'I''I'GGA	CTATTTACAA CAAAAI'IGGA CI'IAI'AAIGI IIAI'IICCAG GGAIGACIAG AACIIIAAIA	TTATTTCAG	GGATGACTAG	AACITIAAIA
	ACAAACCTTG	GGCCAGGCAT	ACAAACCTTG GGCCAGGCAT AGTGGCTCAT GCCTATAATC ACAGCACTTC GGGAGGCTGA	GCCTATAATC	ACAGCACTTC	GGGAGGCTGA
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	GGC 1 GG 1 1 AG	41 I Y				
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SUE	CIGICICIAC	TAAAAATACA	C'I'G'I'C'I'AC 'I'AAAAATACA AAAATTAGUU GGGTGTGGGTG GUGUATGUUA GTAATUUUAG	9199191999	GCGCA1GCCA	GIAAICCCAG
STI						\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \
TUT	TTACTAGGTA	GGCTGAGGTA	TTACTAGGTA GGCTGAGGTA CGACAATCGC	TGGAACCTIGG GAGGCGGAGG		'I"I'GCAG'I'GAG
E S						
HEE	CTGAGATTGC	ACTACTGCAC	CTGAGATTGC ACTACTGCAC TCCAGCCTGG GTGACAGAGA AAGACTCTGT	GTGACAGAGA	AAGACTCTGT	CTCAAAAAA
ET (1						
Rule 2	AAAAAAAAT	ававават автавтата	ATAATAAACC	CTGATGAAAG GTTTCTAAAA TGTTTTCATC	GTTTCTAAAA	TGTTTTCATC
26)						
	TAATGGTTTT	CTTGACAATT	TAATGGTTTT CTTGACAATT AAATTTTCTA TATAATGTCA GTTCATAAAA AAACTGAGAA	TATAATGTCA	GTTCATAAAA	AAACTGAGAA
	CGACCACATG	TCATATCGAC	TGCTTAAAAG AAAATACGTA	AAAATACGTA	TATTTACAAA CATATACACA	CATATACACA
	ATACTGTCTT	TTGTCTGGTT	ATACTGTCTT TTGTCTGGTT AGTTTAGAGG TTAGATAAAC TGCAGTATGT TGTAGTGGAC	TTAGATAAAC	TGCAGTATGT	TGTAGTGGAC
	AGATCATAGA	ACTAGGAGTC	AGATCATAGA ACTAGGAGTC AGGATGTCTG GATTCCTAGG AAGCAATGAA TAGGTTGCAC	GATTCCTAGG	AAGCAATGAA	TAGGTTGCAC

FIGURE 6 (97)

FIGURE 6 (98)

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ವಿತಿತಿ	CAACC	CATAA	CATGG	TGGTC	TAGCT	AAGAA	GGCAT	GGCTT	GAAAC
GTGTC		A AGTC?		: GTCTC	A CATAA	TGTA	TTATC	GACCA	: ACATO
GAATCCCTAG	TGCCTTAGAG	ATCTTGAACA	ATAATATCT?	GTAGAACAGI	TGCTCTGCC?	TTTCTTCCC	AGTCATTTA	GGATTAATGA	TCTATGAACC
CATTGAATCA	GATTGTGATG	CAGGCATGTG	AATAGGCCCA	AACAGACACT	CTTGATTCTC	CTCAGTTTAG	TTGCTATAAA	TACATCTAAG	CTGACTCTGT
TCCTTTAACT	GGCTCTCTGG	TTAGACTTAT	TTATGTTTAA	AGAGATCTGT		TTTAGTTCTT	CATTTCTGAA	ATAAGGACTG	GAGTA AATAGTAACA CTGACTCTGT TCTATGAACC ACATGGAAAC
GAACTGCAGA	TATTTTAGCA	TGATCCTGAC	TTCAGTTTTC	GGATTAGGCA	CTTCCATAAA	GAGCAAGTAA	TACTC	TGTTCACTGT	GCATG
GAGCTTGTTA	CTGAAATCTG	ACTGGGTAGC	TCTCACTGAG	ATTGCTTTGA	TACAGCTGAC	GGTTAACTAT	GGAAAATAAC	TGAAGCTCTT	ATGATTTTAA
	GAGCTTGTTA GAACTGCAGA TCCTTTAACT CATTGAATCA GAATCCCTAG GTGTGGGGCC	GAGCTTGTTA GAACTGCAGA TCCTTTAACT CATTGAATCA GAATCCCTAG GTGTGGGGCC CTGAAATCTG TATTTTAGCA GGCTCTCTGG GATTGTGATG TGCCTTAGAG TTTGACAACC	GAGCTTGTTA GAACTGCAGA TCCTTTAACT CATTGAATCA GAATCCCTAG GTGTGGGGCC CTGAAATCTG TATTTTAGCA GGCTCTCTGG GATTGTGATG TGCCTTAGAG TTTGACAACC ACTGGGTAGC TGATCCTGAC TTAGACTTAT CAGGCATGTG ATCTTGAACA AGTCACATAA	GCAGA TCCTTTAACT CATTGAATCA GAATCCCTAG TAGCA GGCTCTCTGG GATTGTGATG TGCCTTAGAG CTGAC TTAGACTTAT CAGGCATGTG ATCTTGAACA TTTTC TTATGTTAA AATAGGCCCA ATAATATCTA	GCAGA TCCTTTAACT CATTGAATCA GAATCCCTAG TAGCA GGCTCTCTGG GATTGTGATG TGCCTTAGAG CTGAC TTAGACTTAT CAGGCATGTG ATCTTGAACA TTTTC TTATGTTTAA AATAGGCCCA ATAATATCTA AGGCA AGAGATCTGT AACAGACACT GTAGAACAGT	GAGCTTGTTA GAACTGCAGA TCCTTTAACT CATTGAATCA GAATCCCTAG GTGTGGGGCC CTGAAATCTG TATTTTAGCA GGCTCTCTGG GATTGTGATG TGCCTTAGAG TTTGACAACC ACTGGGTAGC TGATCCTGAC TTAGACTTAT CAGGCATGTG ATCTTGAACA AGTCACATAA TCTCACTGAG TTCAGTTTTC TTATGTTTAA AATAGGCCCA ATAATATCTA TTTCACATGG ATTGCTTTGA GGATTAGGCA AGAGATCTGT AACAGACACT GTAGAACAGT GTCTCTGGTC TACAGCTGAC CTTCCATAAA TGGTAGTTGC CTTGATTCTC TGCTCTGCCA CATAATAGCT	GAGCTTGTTA GAACTGCAGA TCCTTTAACT CATTGAATCA GAATCCCTAG GTGTGGGGCC CTGAAATCTG TATTTTAGCA GGCTCTCTGG GATTGTGATG TGCCTTAGAG TTTGACAACC ACTGGGTAGC TGATCCTGAC TTAGACTTAT CAGGCATGTG ATCTTGAACA AGTCACATAA TCTCACTGAG TTCAGTTTTC TTATGTTTAA AATAGGCCCA ATAATATCTA TTTCACATGG ATTGCTTTGA GGATTAGGCA AGAGATCTGT AACAGACACT GTAGAACAGT GTCTCTGGTC TACAGCTGAC CTTCCATAAA TGGTAGTTGT CTCAGTTTAG TTTCTCCC TGTAAAAGAA	CTGAAATTAA GAACTGCAGA TCCTTTAACT CATTGAATCA GAATCCCTAG GTGTGGGGCC CTGAAATTAAC TATTTTAGCA GGCTCTCTGG GATTGTGATG TGCCTTAGAG TTTGACAACC ACTGGGTAGC TGATCCTGAC TTAGACTTAT CAGGCATGTG ATCTTGAACA AGTCACATAA TCTCACTGAG TTCAGTTTTC TTATGTTTAA AATAGGCCCA ATAATATCTA TTTCACATGG ATTGCTTTGA GGATTAGGCA AGAGATCTGT AACAGACACT GTAGAACAGT GTCTCTGGTC TACAGCTGAC CTTCCATAAA TGGTAGTTGC CTTGATTCTC TGCTCTGCCC TGTAAAAGACT GGTTAACTAT GAGCAAGTAA TTTAGTTCTT CTCAGTTTAG TTTCTCCCC TGTAAAAGAA GGAAAATAAC TGTTATACTC CATTTCTGAA TTGCTATAAAA AGTCATTTAA TTATGGGCAT	CTGAAATCTG TATTTTAGCA GGCTCTCTGG GATTGTGATG GAATCCCTAG GTGTGGGGCC CTGAAATCTG TATTTTAGCA GGCTCTCTGG GATTGTGATG TGCCTTAGAG TTTGACAACC ACTGGGTAGC TGATCCTGAC TTAGACTTAT CAGGCATGTG ATCTTGAACA AGTCACATAA TCTCACTGAG TTCAGTTTTC TTATGTTTAA AATAGGCCCA ATAATATCTA TTTCACATGG ATTGCTTTGA GGATTAGGCA AGAGATCTGT AACAGACACT GTAGAACAGT GTCTCTGGTC TACAGCTGAC CTTCCATAAA TGGTAGTTGT CTCAGTTTCTC TGCTCTGCCC TGTAAAAAGAA GGAAAATAAC TGTTATACTC CATTTCTGAA TTGCTATAAA AGTCATTTAA TTATGGGCAT TGAAGCTCTT TGTTCACTGT ATAAGGACTG TACATCTAAG GGATTAATGA GACCAGGCTT

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GCATTIGIAC CAIGAGGCII GGCCAAGGCI ACAAAICCAG ACIITIGIII IICCCICCIG TCTAAAGAAT ATGCACATTT GAAACACAGG TATCATCTGG GGAAGGTGAT CTGCTCACCC ATGAACATCA ATCTCCAGTG GCGTGCTGGA GCTAGCTGTA CCAGCTCATG TCAGGCTAGT AGCTTGAAAT TGGCCACAGT GGGAGTGTGA TGTTAAAAAT TTACCAACAC ACCACTGGTC TTACCTTTGT TAATTTACCA CAGCAAGCTG AGGATAGAGC CATTATTTCT AAGAAGGACT CACATTACCC AAGTGCAAAG CCTGATATAT ACCTTCAGAA AAAATAAGTT AAAATAAAAA CAAAGGAACT CTGTGCCTTG GGATTATTTA ATCCATATGG TGACAATACT ATTCATATAT AAATGGTGTG CTTCTTTCA TAAAAATAGT GTTTGCTGGT ATTTTACTAT CTGGATTTGT TGTAAACAAT AATATTAGAT CCACCTAATT TAGGAATTTT CAGTCCAGGT TCTGACCTAG ACTTAGAAAC GTTTCATTT AATTATCCCC AAACTCTTCC TAACTCTACA TAGCCTGATG AAACCAGTTC CATTGATTTT AGGCCCAATT AATTAAATTA **FIGURE 6 (99)** GAGAGCTGTC SUBSTITUTE SHEET (Rule 26)

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ACACAGAATA	TCCTTGGGCA	CATGACGATG	TGGCAATGCC	AAGGGAAGTT	TCTTCCCCAG	AACAAATCAC	CTTTGCATAT	TTGCATTTT	GTCAGGAGGT
GGGTAAGGTG	GACAGGCAAG	CCTTTCCAGG	TCTTGACACA	GTATTTTTCA	AAATGCTTAG	CGGTATTTC	TTGAAGGTTT	CCCAAAGCAC	TCACACTCTA
GATGACATTA	TTAAGGAAGG	GTAGGACTCT	GATTATCTTT	CTTCAGGGCA	TGTATATTAA	GCCCACGAAT	AGACCACTGC	AGATTTAACT	CCTATACCAC
TTGAATGTTT	ACCTGCTGCC	CCATCTTGCT	CTACTGATGG	ТАТТТТААТ	ATCATTTAGA	TGTTGGTGGG	TATAGTGTGA	ATTGACTTCT	TTGTGGTACC
GTTGCACATT	CAACTGAGAT	TTGTCACTGT	TCCTCCTACC	GGCTGGTAGC	ATGCATCTGT	TCAGAATCTC	CTGTATATAC	ТАТАААААТ	AAGTTTCTGG GGGCATTATA TTGTGGTACC CCTATACCAC TCACACTCTA GTCAGGAGGT
AAAAGAGCTA	TCCATTTCCA	GGACCTTAGA	GCCAACTCTG	TCCAATCAGA	CATGGACCAT	TTATACTAGA	TAGGTAATTT	CTCCACTAAA	AAGTTTCTGG
	AAAAGAGCTA GTTGCACATT TTGAATGTTT GATGACATTA GGGTAAGGTG ACACAGAATA	TTGAATGTTT ACCTGCTGCC	AAAAGAGCTA GTTGCACATT TTGAATGTTT GATGACATTA GGGTAAGGTG ACACAGAATA TCCATTTCCA CAACTGAGAT ACCTGCTGCC TTAAGGAAGG GACAGGCAAG TCCTTGGGCA GGACCTTAGA TTGTCACTGT CCATCTTGCT GTAGGACTCT CCTTTCCAGG CATGACGATG	AAAAGAGCTA GTTGCACATT TTGAATGTTT GATGACATTA GGGTAAGGTG ACACAGAATA TCCATTTCCA CAACTGAGAT ACCTGCTGCC TTAAGGAAGG GACAGGCAAG TCCTTGGGCA GGACCTTAGA TTGTCACTGT CCATCTTGCT GTAGGACTCT CCTTTCCAGG CATGACGATG GCCAACTCTG TCCTCCTACC CTACTGATGG GATTATCTTT TCTTGACACA TGGCAATGCC	AAAAGAGCTA GTTGCACATT TTGAATGTTT GATGACATTA GGGTAAGGTG ACACAGAATA TCCATTTCCA CAACTGAGAT ACCTGCTGCC TTAAGGAAGG GACAGGCAAG TCCTTGGGCA GGACCTTAGA TTGTCACTGT CCATCTTGCT GTAGGACTCT CCTTTCCAGG CATGACGATG GCCAACTCTG TCCTCCTACC CTACTGATGG GATTATCTTT TCTTGACACA TGGCAATGCC TCCAATCAGA GGCTGGTAGC TATTTTTAAT CTTCAGGGCA GTATTTTTCA AAGGGAAGTT	AAAAGAGCTA GTTGCACATT TTGAATGTTT GATGACATTA GGGTAAGGTG ACACAGAATA TCCATTTCCA CAACTGAGAT ACCTGCTGCC TTAAGGAAGG GACAGGCAAG TCCTTGGGCA GGACCTTAGA TTGTCACTGT CCATCTTGCT GTAGGACTCT CCTTTCCAGG CATGACGATG GCCAACTCTG TCCTCCTACC CTACTGATGG GATTATCTTT TCTTGACACA TGGCAATGCC TCCAATCAGA GGCTGGTAGC TATTTTTAAT CTTCAGGGCA GTATTTTTCA AAGGGAAGTT CATGGACCAT ATGCATCTGT ATCATTTAGA TGTATATTAA AAATGCTTAG TCTTCCCCAG	AAAAGAGCTA GTTGCACATT TTGAATGTTT GATGACATTA GGGTAAGGTG ACACAGAATA TCCATTTCCA CAACTGAGAT ACCTGCTGCC TTAAGGAAGG GACAGGCAAG TCCTTGGGCA GGACCTTAGA TTGTCACTGT CCATCTTGCT GTAGGACTCT CCTTTCCAGG CATGACGATG GCCAACTCTG TCCTCCTACC CTACTGATGG GATTATCTTT TCTTGACACA TGGCAATGCC TCCAATCAGA GGCTGGTAGC TATTTTTAAT CTTCAGGGCA GTATTTTTCA AAGGGAAGTT CATGGACCAT ATGCATCTGT ATCATTTAAT CTTCAGGGCA GTATTTTCA AAGGGAAGTT TTATACTAGA TCAGAATCTC TGTTGGTGGG GCCCACGAAT CGGTATTTTC AACAAATCAC	TCCATTCCA CAACTGAGAT TTGAATGTTT GATGACATTA GGGTAAGGTG ACACAGAATA TCCATTCCA CAACTGAGAT ACCTGCTGCC TTAAGGAAGG GACAGGCAAG TCCTTGGGCA GGACCTTAGA TTGTCACTGT CCATCTTGCT GTAGGACTCT CCTTTCCAGG CATGACGATG GCCAACTCTG TCCTCCTACC CTACTGATGG GATTATCTTT TCTTGACACA TGGCAATGCC TCCAATCAGA GGCTGGTAGC TATTTTTAAT CTTCAGGGCA GTATTTTTCA AAGGGAAGTT CATGGACCAT ATGCATCTGT ATCATTTAAA TGTATATTAA AAATGCTTAG TCTTCCCCAG TTATACTAGA TCAGAATCTC TGTTGGTGGG GCCCACGAAT CGGTATTTTC AACAAATCAC TAGGTAATTT CTGTATATAC TATAGTGTGA AGACCACTGC TTGAAGGTTT CTTTGCATAT	TCCATTTCCA CAACTGAGAT ACCTGCTGCC TTAAGGAAGG GACAGGCAAG TCCTTGGGCA GGACCTTAGA TTGTCACTGT CCATCTTGCT GTAGGAAGG GACAGGCAAG TCCTTGGGCA GCCAACTCTG TCCTCCTACC CTACTGATGG GATTATCTTT TCTTGACAC TGGCAATGCC TCCAATCAGA GGCTGGTAGC TATTTTTAAT CTTCAGGGCA GTATTTTTCA AAGGGAAGTT CATGGACCAT ATGCATCTGT ATCATTTTAAT CTTCAGGGCA GTATTTTTCA AAGGGAAGTT TTATACTAGA TCAGAATCTC TGTTGGTGGG GCCCACGAAT CGGTATTTTC AACAAATCAC TAGGTAATTT CTGTATATAC TATAGTGTGA AGACCACTGC TTGAAGGTTT CTTTGCATAT CTCCACTAAA TATAAAAAAT ATTGACTTCT AGATTTAACT CCCAAAGCAC TTGCATTTTT

FIGURE 6 (101)

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TTAGCTTCCA	ATGAATGGGA	TGCAGTGAGA	TGGCACCTGG	ATACCCCACC	TTTTCAGGGC	GAACTAAGGC	GTTGAAGGAA	TTCATGAAGG	TGCTTTTCTG	AGAAGCAAAA
ATATTATGGA CTGAATGTTT GTGTCCCTCC AAAACTCATA TGTTGAAGTC TTAGCTTCCA	TCAAGCCCTC	TAGAAAGAGA GCTCGTCACT GTCTTTCCAT CAATTGAAGA TGCAGTGAGA		TCTCAGACTT TCTGCCTCCA GAACTATGAG ATGATAAATT TCTGTTGTTC ATACCCCACC	TTGCCTTTAC	AAAAACTGCA ATTACTTTTG TGCCAACCTA ATATTTTGTT ATAGCAGCCC GAACTAAGGC		TTCAATCTCT		TGAAATCTCA GTGTATACAG ATGAAGAGCA AGGGTTTGCT TTCATCTCTA AGAAGCAAAA
AAAACTCATA	GGAGAT GGTGCCTTCT GGAGGTAAAA TCAAGCCCTC	GTCTTTCCAT	CTTGCATCTG GAAGAGGGCC CTCACACAAC CTGATCATGC	ATGATAAATT	TTTGTGATTT	ATATTTTGTT	GTAAGTACAA ATGTATCCCT	TAGCCACCTT	TCACTG GTGGCAAAA TAGAGCACGA GAATGGAATT	AGGGTTTGCT
<u> </u>	GGTGCCTTCT	GCTCGTCACT	GAAGAGGGCC	GAACTATGAG	CTGCAAAGTA	TGCCAACCTA	GTGTAGCTAT	TTCAGGCCAG	GTGGCAAAAA	ATGAAGAGCA
CTGAATGTTT	ATTA	TAGAAAGAGA	CTTGCATCTG	TCTGCCTCCA	TATTAGGTTG CTGCAAAGTA	ATTACTTTTG	AAGGGAGACT ACATCAGACA GTGTAGCTAT	AACTAAGTTC TAACCCTGAC TTCAGGCCAG TAGCCACCTT	ATTATCACTG	GTGTATACAG
ATATTATGGA	ATGTGATAGT	TTAGTGCCTT	AGCTGGTAGT	TCTCAGACTT	CAGGCTACAA	AAAAACTGCA	AAGGGAGACT	AACTAAGTTC	GACCATTATC	TGAAATCTCA
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FIGURE 6 (102)

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GCTCTTCTAA	AACACAAACG TATCTACATG CCTTTTCTTG TGAATAGATC TAATAATAAC GCTCTTCTAA	TGAATAGATC	CCTTTTCTTG	TATCTACATG	AACACAAACG
TGGATCATCA	CTATAT TATATAAATT GTTCTTGTAT ATGTCTTGAG TGGATCATCA	GTTCTTGTAT	ТАТАТАААТТ	ATGGCTATAT	TAACAGGAAG ATGG
TTTTAATAAA	GTATTTTTAA ATAAAATGGT GAATAGATCA AAACATTAAT TTCACATGTG TTTTAATAAA	AAACATTAAT	GAATAGATCA	ATAAAATGGT	GTATTTTAA
GCTTAATAAA	TTGCCTTTCA CATAGCAAAA GCTTAATAAA	TTGCCTTTCA	TAATGATGTT	AAAGGATGGG TCATTTTGTT	AAAGGATGGG
CATTCACAGG	TTGAAATTTT TTTAAAAATG GACTCATTTT AGTGTCACAA GAAAAAAATA CATTCACAGG	AGTGTCACAA	GACTCATTTT	TTTAAAAATG	TTGAAATTTT
CAGCAATTTG	TCTCTTTCCC CAGCAATTTG	CATCCAGCAG	GTTCTTTCAG CATTAGGATT	GTTCTTTCAG	ATCAACTGTT
CTACGTTCTA	TATCAATAGT GCCAAAGTTG AGAAACCTCA TTCTAGCTTC CTTTTCCCTT CTACGTTCTA	TTCTAGCTTC	AGAAACCTCA	GCCAAAGTTG	TATCAATAGT
TGGCCCCCAAA	GTTAAACATC CCGCAAAGCA CAGGACAGTC CCCGACAACA AAGAATTATC TGGCCCCAAA	CCCGACAACA	CAGGACAGTC	CCGCAAAGCA	GTTAAACATC
CAGAGATGCT	AGCTGGGGGA TGAGTGGGTG GGTTGCTACT GGCATCTAGT GGGTGGAGAC CAGAGATGCT	GGCATCTAGT	GGTTGCTACT	TGAGTGGGTG	AGCTGGGGGA
TATTTGTTAT	AGGAGTGAAT TTGACTCCAG GGAACAGTTG GCAATGTCTG GAGACGTTTT	GCAATGTCTG	GGAACAGTTG	TTGACTCCAG	AGGAGTGAAT
GGTCTTAACC	GTGAGTACGG ACTGGCACAT TATCAGAGAA AGAATCATTC TAGCTCGGTG GGTCTTAACC	AGAATCATTC	TATCAGAGAA	ACTGGCACAT	GTGAGTACGG

FIGURE 6 (103)

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AGAAGCCAGC	AAGCACGTGG	TAAAAAGAAA	ААТТАТАААА	TAGTCAATAA	TTGTACCTGC	TGATAGCCAC	TAGAGAATGA	CTGGGTAAAA	TCACAGGATG	AAGCCAGCCA
TTGTGTGAAT	AATGTCAGAA	TCACTATGAC	AAAACCAGTT	AAGTAGCATA	ATTTGCTTTT	TTCCATAGTT	GATTCAGCTA	TGAATACGGG	GCATTCTAAG	TGTAATAAAG
ATTTGCTGAG AATGTAATGC TTGTGTGAAT AGAAGCCAGC	CCCAGA TCTATTTAAA GAATTTGAAG AATGTCAGAA AAGCACGTGG	ACTTGAAAAA	TGTAAATTGG AATGACAGCC AAAACCAGTT	TCAAATTTGT TTCTTCTCC AAGTAGCATA TAGTCAATAA	GCAAAG AAGGGGAAGC ACTGAACCAA ATTTGCTTTT	GAGTTC TCTACCTGGA AATTGACTGC TTCCATAGTT TGATAGCCAC	AGAAGG AGAGGTATAA TCCCAGACTT GATTCAGCTA TAGAGAATGA	CAACCAGAGC GACTCCATCT TGAATACGGG CTGGGTAAAA	ACTGGG CTGCATTCCC AGGAGGCTAA GCATTCTAAG TCACAGGATG	CACAAG ACCTTGCTGA TAAAACAGGT TGTAATAAAG AAGCCAGCCA
ATTTGCTGAG	TCTATTTAAA	ACTCACAGAA	TGTAAATTGG	TCAAATTTGT	AAGGGGAAGC	TCTACCTGGA	AGAGGTATAA	CAACCAGAGC	CTGCATTCCC	ACCTTGCTGA
AATGGATATT	AGCCCCCAGA	CTTCAAGGTT AATGTGTAAG ACTCACAGAA ACTTGAAAAA TCACTATGAC TAAAAAAAAA	CATGCC	ACAGCTAATT TAACAGGTTT	GAAAGCAAAG	TGCAGAGTTC		CAATAGTGTC AGAGGCCTTC	ACCTACTGGG	TCAGCACAAG
AAACAAATTA AATG	CCTGAATCCA AGCC	CTTCAAGGTT	GTATGAGCTC CCTG	ACAGCTAATT	TCCTTAAAGA GAAA	TCAGCTCAAA TGCA	AGAGAGATGG GAAC	CAATAGTGTC	CAGGGCTGAG ACCT	AGACAGGAGG

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AAACCCACCA	AAACCAAGAT	AAACCCACCA AAACCAAGAT GGCCATGAGA GTTATCTGTG	GTTATCTGTG	GTTGGTCTCA CTGCTCATTG	CTGCTCATTG
TATGCTAATT	ATAATGTATT	TATGCTAATT ATAATGTATT AGCATGTTAA AAGACACTCC CACCAGTGCT ATGACAGTTT	AAGACACTCC	CACCAGTGCT	ATGACAGTTT
ACAGGTACAT	ACAGGTACAT TGGCAACTTC	CGGAAGTTAC	CCTCTATGGT	CTAAAAAGGG GAGGAACCCT	GAGGAACCCT
CACCTCCCAG	AATTGCCCAC	CACCTCCCAG AATTGCCCAC CCCTTTCCTG GAAAACTTGT GAATAATTCA CCCTTGTTCA	GAAAACTTGT	GAATAATTCA	CCCTTGTTCA
GCATATAATC	GCATATAATC AAGAAGTAAC	TGTAAGTATC	CTTAGGCCAG	CTTAGGCCAG AAGCTCAGGC CACTGCTCTG	CACTGCTCTG
AATGTGGAAT	AATGTGGAAT AGCCATTCTT		TTATCCTTTA CTTTCTTAAT AAACTTGCTT TCACTTTACT	AAACTTGCTT	TCACTTTACT
GTATGGACCC	GTATGGACCC CTGTGAATTC	TTTCTTGCAA	TTTCTTGCAA GAGATCCAAA AACTCTCTCT	AACTCTCTCT	TGGGGTCTGG
ATCAGGACCT	CTTCCCAGTA	ATCAGGACCT CTTCCCAGTA ACAATAGTAG TAAGGGGTCG GGGAAACTGG ACAAAGGAGT	TAAGGGGTCG	GGGAAACTGG	ACAAAGGAGT
TTAAGAAGCC	TTAGATAAAG	TTAAGAAGCC TTAGATAAAG GGTCCTCATC ATTGTCATAA CATAAAATCA TGGACTCCTA	ATTGTCATAA	CATAAAATCA	TGGACTCCTA
GAATTTTATA	GCTGATAGGA	GAATTTTATA GCTGATAGGA TTAGAAATTT CAAAATTCAA TTTCATTAAT TTTCATCTGC	CAAAATTCAA	TTTCATTAAT	TTTCATCTGC
GAAAACAGAT	GGCCAGAGAG	GAAAACAGAT GGCCAGAGAG GCCAAACAAT TTGTTAAGGA GCACTGAGGC GATGGAACAC	TTGTTAAGGA	GCACTGAGGC	GATGGAACAC

FIGURE 6 (104)

FIGURE 6 (105)

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TCAGTCAGAA	CAGTCTGACT	TCATTCATCT	TTGAACCCAG	ACGGGATAAC	GATGCTACAC	GAAAATTTGA	GTGATCTCTA	GCTTGGGGAC	CTTTTAAATA	AATAGTGACA
ATACAAGGCC TTTGATCTCC TCAGTCAGAA		CATAATCTCC	CAAAAGTAAA	TTACTGGGAA ACGGGATAAC	TCCACCTATA GATGCTACAC	ATTAAAAAAA	GTGTATCATG	TTAACACATA ACTGACAAAG GCTTGGGGAC	TGTTTGTCCT	AACCATAGAA
ATACAAGGCC	TGACTGTTTA GCATGTTTGC	тссаствтат	GTTAGTTGAA	AATTGTCAGC	ATATGCTTTT	АААТТААААА	GATTCCTTAA	TTAACACATA	TTTTATTGAT TTTTTTTCT TGTTTCT CTTTTAAATA	TCAGTGGAGA AACCATAGAA AATAGTGACA
CTAGCAGAGT	GTACCCTTTC	АТСТGТСАТТ	СТСАĞТАААТ	CATAATCTGG AGCACTTTAA AATTGTCAGC	TTTTTTCTC	ATAAAAATTA	GTTGTGATTA	GCTTTGGGTT	ТТТТАТТСАТ	TAATTCATGT
CACACTGGAC CGCAAACCTC	TGAACTAGAG CTTTCCAGGG GTACCCTTTC	AATTTTGAAG TTGCTTAAAT	TCAATCTCCA ATGCCTTGAA CTCAGTAAAT GTTAGTTGAA CAAAAGTAAA	CATAATCTGG	ATGTGATTTG TCTTTGATTT	GAATGTTTT AAAATCTGAT ATAAAATTA AAATTAAAAA ATTAAAAAAA GAAAATTTGA	TACAATGCTA CATTTAGAGT GTTGTGATTA GATTCCTTAA GTGTATCATG GTGATCTCTA	тдатсааатт	ATGTAAGATC CCAAATACAT	GTTATAAGAA
CACACTGGAC	TGAACTAGAG	AATTTTGAAG	TCAATCTCCA	AATTTCTGAT	ATGTGATTTG	GAATGTTTTT	TACAATGCTA	CATCACGTGG	ATGTAAGATC	ACTTTTTTT

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GAAGGAA	TAAATTTAAA	AGTGAAGGAA TAAATTTAAA ATGACCCATA ATTGTACCAT ACATTCTGAT TTTTTAAACG	ATTGTACCAT	ACATTCTGAT	TTTTTAAACG
AAAT	CTGAACAAAT TAGCCTTGGG	TAAGTACCAG	TAAGTACCAG GAATAGAGTG CAGCATTGAA AGTTAAAGTT	CAGCATTGAA	AGTTAAAGTT
AAGGA	TAGCTGACTT	TGGGGAAGGA TAGCTGACTT AAGAAATTAT CTAGTTAGAC ATTTTTTGGA TGGGGTAATT	CTAGTTAGAC	ATTTTTGGA	TGGGGTAATT
SATGA	CATTAGTGAG	TTGCAGATGA CATTAGTGAG AGAAAGGACT TGCCACTCTC ACACAGCTAG TAGGGGTGTG	TGCCACTCTC	ACACAGCTAG	TAGGGGTGTG
ATATT	GGAACCAAGT	GGAGGATATT GGAACCAAGT TTCAAGTCTT CAGTGAAGAA TCAAGGGAGA AGTTCTAAAA	CAGTGAAGAA	TCAAGGGAGA	AGTTCTAAAA
CCTAACAATA		TCCCTCTGGA TGGACATTTA TTTTATTACT ACAATAAGCC ACACGGTGAG	TTTTATTACT	ACAATAAGCC	ACACGGTGAG
AGGAG	CATTTCATTC	TCATAAGGAG CATTTCATTC TTCTAATATG TCTCTACTGT ATTTAGAATC TGATAAAGCC	TCTCTACTGT	ATTTAGAATC	TGATAAAGCC
CTATTAGAAT		TCATCTTTT AAGAATAAAA GAAGCTGAGG AACTAAAGAG AGGGTTGGAA	GAAGCTGAGG	AACTAAAGAG	AGGGTTGGAA
CACTA	ATTATATCCG	TAATCCACTA ATTATATCCG TTAAGCTTCA GTTACGCTAA TAAGGAATAT CACATGACTG	GTTACGCTAA	TAAGGAATAT	CACATGACTG
TGGTGTGTGC		TTGTTCTGAA CAGTAAAGTA CATGAGGAAA GATAAGATTC AGGGCTGAAA	CATGAGGAAA	GATAAGATTC	AGGGCTGAAA
TCAG	CATATGTAGG	TGTCCTTCAG CATATGTAGG TAGTGGTGAT GAAAGTCATT AAAAGAAAAA TTGATTGAGG	GAAAGTCATT	AAAAGAAAAA	TTGATTGAGG

FIGURE 6 (107)

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ACCCATCAGG AAGTGTATTG TTAATGCAGT	GCTGTTCAGC CTTCTGGAAG AAAAGGTTTC TTCATGCTTC TCTCTTTAGC CTAATTCTTA	TTTCAGGCAA AATTAAAAAA AAAAAAGAT TGAAAACGAT GCTCCTATTT	TATTTGCTTC AAAAGAAACA GGCTGTTGCA TTGTGCTTGG AACAGTTTAC TCTTGGCCTT	GATGTAAGTG TGAAAGGAAG CCCATGTAAT TGACTAGGCA GTATCTGAAG AAGCAGGAAA	TACAGTGTTA AGAAAATGAA CAGGCATGAA AACCATGGCT ATTTGATAAA AGTAAATAAT	TCTTTGATAC TGACTTGCTT AATATGACAA	TAGCAGAACC ATGGTAGCTT GTAGGCATTA CTTTTCTTTT	TATTACTTTT GGGTTATACT GAGGATCTAT AACTTATAGA	TCAAATACCT GACATATATA TGCATTCTCT GAAGTCTTAG GGCAGAACTA GAACATTCTT	**************************************
	AAAAGGTTTC TTCA	AATTAAAAAA AAAA	SGCTGTTGCA TTGT	CCATGTAAT TGAC	CAGGCATGAA AACC	CAGCATATTT TCTT	FRAGGCATTA CTTT	PATTACTTTT GGGT	GCATTCTCT GAAG	ביים אינים אינ אינים אינים אי
TATTTTAGTA AACAAAGAA CTCACCACTT	CTTCTGGAAG A	TTTCAGGCAA A	AAAAGAAACA G	TGAAAGGAAG (AGAAAATGAA C	TTCTGCAGTT CACATGTTCT C	ATGGTAGCTT G	TTTACCAGCA CTCACATTTG I	GACATATATA T	F * F * C * * F F F F F F F F F F F F F
TATTTAGTA	GCTGTTCAGC	TCCTGTCACT	TATTTGCTTC	GATGTAAGTG	TACAGTGTTA	TTCTGCAGTT	TAGCAGAACC	TTTACCAGCA	TCAAATACCT	£ 0 E 0 E 0 E 0 E 0 E 0 E 0 E 0 E 0 E 0

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CACATACAAC	AAAAGAAAAT	CACCCTAAGA	CCACTGCCCC	AATTACCCAC CCACTGCCCC CACCCTAAGA AAAAGAAAAT CACATACAAC	TGTCTCTAAC
AGAGTGGGGG	CCAGTGATGG	GGAAAGATGC	AAATTACATA	GATTCATTCC CCCGTGGAGC AAATTACATA GGAAAGATGC CCAGTGATGG AGAGTGGGGG	GATTCATTCC
ATTGGAACTA	TCAGTGCTGA	GGAGGTACCT	GAGAGAAGCT	GAAGAAGAAA CACTCAGTAG GAGAGAAGCT GGAGGTACCT TCAGTGCTGA ATTGGAACTA	GAAGAAGAAA
GAGGTCCCTG	TTGACTTAGG GCTAGTCTAA GAGGTCCCTG	TTGACTTAGG	CTCATGAGTG	GATGGCCTGC ACTGAAAAGC CTCATGAGTG	GATGGCCTGC
GAGTCCAAAA	TCTGATCGTG	GGTTGGCTGC	CAGGGAGACA	CTTCTGACTC ACAGCTAAGT CAGGGAGACA GGTTGGCTGC TCTGATCGTG GAGTCCAAAA	CTTCTGACTC
TATGGTCTAG	ATGTGGAG ACTGTTGCTT AGGGAGACCT	ACTGTTGCTT	ATGTGTGGAG	CAAGAGTCTA	AAGACCACTT
GGACCTCAAC	AGTTGGAAAA	CCTCAAGCAT	GGCCTGTGCT	CACTGAGGCA GGGTAGGAGA GGCCTGTGCT CCTCAAGCAT AGTTGGAAAA GGACCTCAAC	CACTGAGGCA
CCCCTACCAC	AATGAATCCA	GTGTGCTATG	ATAAATGTTA	GTTGGAGAGT ATTTTCAAAG ATAAATGTTA GTGTGCTATG AATGAATCCA CCCCTACCAC	GTTGGAGAGT
TTGGAAATCA	AGTATATATA	CCTTGACAAG	AGTATTTCAC	ACAATTATTA AGTATTTCAC CCTTGACAAG AGTATATAT TTGGAAATCA	AATCAGTTTT
GGTAGGGGGA	ATCTGTGTGG GATAGGAAGA GGTAGGGGGA	ATCTGTGTGG	тттаататат	ATGTGTGT ATTATATATA	ATGTGTGTGT
АТАСАТАТАТ	ТТАААТАТСТ	CATACAGGAT	GCCAGCACAC	TATCATAGTC TGAAATGAAT GCCAGCACAC CATACAGGAT TTAAATATCT ATACATATAT	TATCATAGTC

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FIGURE 6 (108)

FIGURE 6 (109)

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GCTAGCAAGA TGGGGAGAGG AGGAGAAGCT GTAAGTGGGG AAAAAAGAGC AGCTTTCTCT CCTTTTTCAGC TGCTGATTC TCCCTCATCA TAGGCCTGAG CTGGGGAATC AGGAAGAAGGAATCATTTTTTA AAACTGAAGT AACGTTATCA TTTAATTTTA AAACATTTTA AAATTTTGACA	AGCTTTCTCT AGGAAGAAGG AATTTTGACA TTGAAGTGAT CATCCTTTTA GAAGAAACT GAAGAGAAACT GAAGAGAAACT	GTAAGTGGGG AAAAAGGGC AGCTTTCTCT TAGGCCTGAG CTGGGGAATC AGGAAGAAGG TTTAATTTTA AAACATTTTA AATTTTGACA CTAAGATTAT GTTTTGCAGC TTGAAGTGAT AAAGTCGGGG GTTTCCTGAA CATCCTTTTA TTTAAAGTGT AGACTGGGCC TTCAGAAACT TGGGGACTAT ACCTTGTGTG GAAGAGAAA TTTTTCAAAA AGAAAGCTCA GCTAGCATGA TTGCATATTC AAATCTAGTG CATATCATGT	GTAAGTGGGG TAGGCCTGAG TTTAATTTTA AAAGTCGGGG TTTTAAAGTTGT TTTTAAAAGTGT TTTTTCAAAA	TGGGGAGAGG AGGAGAAGCT GTAAGTGGGG AAAAAAGAGC AGCTTTCTCT TGCTGGATTC TCCCTCATCA TAGGCCTGAG CTGGGGAATC AGGAAGAAGG AAACTGAAGT AACTTATAAA CTAAGATTAT GTTTTGCAGC TTGAAGTGAT CTTATCTAAG AGCATCCAGG AAAGTCGGGG GTTTCCTGAA CATCCTTTTA AAGTCAGCTT TCAGAGAGGA TTTAAAGTGT AGACTGGGCC TTCAGAAACT AGGGGTTTCC TATGCAGACT TGGGGACTAT ACCTTGTGTG GAAGAGAGAA TCTTACATTT TTCCCATTCC TTTTTCAAAA AGAAAGCTCA GCTAGCATGA CAAAACGTAA TGGGTATTAT TTGCATATTC AAATCTAGTG CATATCATGT	GCTAGCAAGA TGGGGAGAGG AGGAGAAGCT GTAAGTGGGG AAAAAAGAGC AGCTTTCTCT CCTTTTCAGC TGCTGGATTC TCCCTCATCA TAGGCCTGAG CTGGGGAATC AGGAAGAGG ATTTTTAA AAACTTTTA AAACATTTTA AAACATTTTA AAACATTTTA AAACATTTTGACA AAGTTCAGAAAACT TAGATAATTTAAA CTAAGATTAT GTTTTGCAGC TTGAAGTGAT AAGAAAAACT CTTATCTAAG AGCATCCAGG AAAGTCGGGG GTTTCCTGAA CATCCTTTTA AATTCTTTGG AAGTCAGGGA TTTAAAGTGT AGACTGGGCC TTCAGAAAACTT TCAGAGAGGA TTTAAAGTGT AGACTGGGC TTCAGAAAACTAAAATT TTCCCATTCC TTTTCCAAAAAGTGT AGAAAAGGTAA AGAAAAGGTAA TGGGTATTAT TTGCATATTC AAATCTAGTG CATATCATGT	GCTAGCAAGA CCTTTTCAGC ATTCTTTTTA AAGAAAACT TGGTTAATGT AATAAGATTA AAGTTAAATT
TGGCAAGTAA GAACATTCCT GATTCCCTTC CTCTCTTCTC TTTGCCCTCC AACCTTAGTG	AACCTTAGTG	TTTGCCCTCC	TAAACTCAGA	CCGAGCCTAG	TAAACATATG	AGTCAGCTG
	CCAGGGTACC	CCGAGCCTAG TAAACTCAGA TACTAAGTTA CCAGGGTACC	TAAACTCAGA	CCGAGCCTAG	CAGTCAGCTG TAAACATATG	GTCAGCTG

FIGURE 6 (110)

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TTTT TTTCTTTCGA	SAGT TTAGGCTTTC	ATCACAAAGA GAGGACAGCC TTGAAGATTA AAGTGTGTGG CTCTTCTCAA GATGTTCTTA	AACC TGTATTTCTT	TTTTTAAAGG AAAATTCTT CCATGGTTGA	rcar garargacrg	TAGAAGCTCA TTTGACTTAA GACACATCAT TTCCTCATGG AAGTGTTAAA CAGATCTGTA	TCCTGCTCTA AAGAAAGTGT	ATATTTCAAA ATGTGAATGT CAGCAGTCAG AAAATAGTAT TTTTTTAACT TCGTTTTCAA	ITGT TTCTTCTTCT	CCCTCCCAGA AACTTTGAAG TTTTTCTACA TGACACCAGG ACCTATGTCT TTTTTAATT
TGGATT	CTTTAAGAGT	CTCTTC	TCTCATAACC	AAAAAT	GAAGTT	AAGTGT	TCCTGC	TTTTT	CACAGA	ACCTAT(
CATTATTTCA AATGACAAGC TGGATTTTTT	TTGGTTTGGG	AAGTGTGTGG	CTTCCTTCTG	TTTTAAAGG	TATATCAAAG GAAGTTTCAT	TTCCTCATGG	GTGTAAAACA GTTTTTTTTC	AAAATAGTAT	TTTTTTTCC CACAGATTGT	TGACACCAGG
CATTATTTCA	TTGGAACCTT	TTGAAGATTA	CATATTTGGG	TAAGATTTTT	GATACAGTTT	GACACATCAT	GTGTAAAACA	CAGCAGTCAG	TAATCATGAA	TTTTTCTACA
AAGTACTGAA TTATGGTATT	ATTTCACAAA TTAATTTTCC	GAGGACAGCC	GTCCAGCAAA GGATTCTATG	GATATTCTAT TTATATTCTG TAAGATTTTT	AGGACATGTC AAAAATAGAG GATACAGTTT	TTTGACTTAA	CAATAAGGTT GGCAATCTTT	ATGTGAATGT	AGTCCTCAAA AACCTGTACC	AACTTTGAAG
AAGTACTGAA	ATTTCACAAA	ATCACAAAGA	GTCCAGCAAA	GATATTCTAT	AGGACATGTC	TAGAAGCTCA	CAATAAGGTT	ATATTTCAAA	AGTCCTCAAA	CCCTCCCAGA

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ACACAGAAAT GAAAGAAAAA AAGTGTGTTG TATCGTTAAC CAAATATATG AAATCTTTAA ATCAAGGGGA AAATTGTAGA AATTTTAAAG TTAAATAATT CAAACAGATT CAAAATCTCC TTTGAAATTT AGATAAAGCT TAGCAGTTGA CTTCTCACAT TCCAAATTTA AAGCTTCCTT CTCTGTGCTA ATAGAGATAC GGCGTTTAAG AAGAATGAAT CAACAATTTA AAACTATAAT GTGTTTTTTA TCACCGCAAC CTCTGCCTCC CGGGTTCAAG TTTGTTTTGC AAAGAGGCCA TTCCCTTTGG GTTATAAAAA TAAGAGAACC AATCGTGAAG TCATTACATC TAAGCATAAG TTACAATTCA GGAATATCGA ATATITGITI TGTTTTGAGA AGGAGITCTG CATCCCTGAA TCTTTGGAGA GAAGAAAGA AAGCCTGCAC TCCTCATATT ACGTAAAATT TGCTGTGGCA CGATCTCAGC TATTTTAAC GCAATGTTTT AGTTTCCTTG TAAGTCAAAC TTAAGTTATA TTATTCACAT GAAGCTCTAG GCTGTATTTT TGTTATTCAC ACTGAACCTG TCTTGGATCA TGGTAACTTG GTTTAATAGA AATAGCAGTA CAGGCAGGAG TTCATCTCCC

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FIGURE 6 (111)

FIGURE 6 (112)

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CGATTCTCTT GCCTCAGCCT CCTGAGTAGC TGCGATTACA GGCGTGCGCC AGCAACCCCG TICTGGCCCT TATICGCATA CAATITAAAA ATCATCACAG AAGGITIGAA TCCTCTCCCC AGGGATCTCC TTCAAATCTG GCCTCAATTT ACTGAGCAGT CACACCTCAC AGAGGGAGGT CACAGGAAAG CCATTGACCC TCCCACTTCC TCTCCTCCAC TTATCAGGIT AAGIGATIAG TICICITICC CICTAGIIGC ICICACICCC IGACICITGC TAGATCAGAC AGAAACATAG TAGAGACAGG GTTTCACCAC GTTGGACATC TTGGTCTCGA TITCIGITCA AGICCIAGAA CIGGITICIT CAAGCCCCAG ACTICICICI AGCCCGCCTC GGCCTCCCAA AGTGCTGGGA AACTCTTTCA AAACCAGCTC TGAGTGAGCC CTTGTTCTCA ACTCTTGACT TTGGGCTTTG TACCTACTTT GGGCTTTAGT TCGTAAGGCA GGTGCCCTAC GGCAGAAAAT CACTCTTGGT GTATTTTAG TCAAGTGATC TCAGGCCCAG CTTCTGTAAC AACTGGAGAC AGAAGGAAGG CTGGGCAATC TGCCTTTTCC GCTAATTTTT ACCCCTGATC GAGCCATCAC

FIGURE 6 (113)

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FIGURE 6 (114)

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CCAGAGGTAG ACAGAAGACC CAAGCCAGGC CAGTTACACA CAATCTTCAG ATAATTACCG	TATTGATCAC AGTATCACCC CACTCAAGGC TTGGTTGGAG ATGAGCAGAA GAGACTAAAG	CTGGGTCATT TTAATTAACA CCTGTACCCC AAAGAAAGAC TGTCAATGAG GCTTTTATAC	CGACACTCCT GGTTTCCATT CTTCCTGATG CCATTCATTT GACGAACTAC CCAATCTTTC	CAACAGTGTC TTTGGAAGAA AGATAGTCAG AAAAGAAGAT AGAGTTGTTT TCTGTTCTTT	GCAACCAAGG AACTCTAAAT GATAGACTTG TTGCTAGGCA CTTTGGTTAT TTTTATTATC	PACTT CTGTGATATA CTTCTTTGTG CATGCCTGTT TGTACGGATG TAGCTTTTTA	FTTAT ATAATTTCTC AGAAGTGGAA TTACTTAGTC AAAAGGTATG AACATTTTCT	FTAAT ATAAATTGTG CAAATGCTTT TTAAGAAGAT TATACCAGTT TACATTTTGT	GTTATATATA ACAGAAAGTA CTACTGAAAA ATATTACAAA AATTGTCTCT CTGTTCAGGA	K K K KHHHHO KO HHHHH KOOKOK HKOK KOOKHK K KOHHOKHOK K KHKOHKOKH K KHOHHOKOK
CCAGAGGTAG A	TATTGATCAC A	CTGGGTCATT I	CGACACTCCT G	CAACAGTGTC I	GCAACCAAGG A	TTGAATACTT CTGTG	тататттат а	GATTCTTAAT ATAAA	GTTATATATA A	

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TTTCGTGAGG CACATAGAGC TAGTGTGGTA GAGTGCTGTA CAGATGTCAA CGGAATCCTT AGAATTATGG CCAGACATTT ATAGATGATC TGTACCAAAC CTAGTTGGTT ACATAAATTG CTTATTCAAC TGGCTTAAAT CTATAATAGA TTACTGAATG TTTAATATAC ACTTTGTCAG GGGCTTTGTA TTATTCTATG CTTTCCTATT TTATAGTAA GGACAGGAAG GCTTCAAGAA TITCCCAAGG GCTGTACCAA AGCCAGAACC CAAATCTATA AGGCTTTTAA TCTCGGCCAT CTTATTCCTA CAGAACTTAA GGTTAGAAAG TAACCAGACA AACTTGAGGA ATTCACTCAA CTAATCTTTA AAACTAAAAC AATAATACTG GCCCTACCTA GTGTTAGCGT GAATTACTTA GATCCCTGAA CACCATGGAT GAATGTGTCT GACTGCTATT CATTGGCTTA TICCTATAAT GCCAGCACTT CACCACTTAG AGAGGTCATA AAGAATATTG GGGCCAGGTA GTCCCAATTT TAATTTCATT GGGTTATTTA ACATCTTCAA AATGACCCTA TAAAACTGCA CGTCTTTGAA TCTCCATTTC AAGATGACAC TTTCCTAAAA CATGACTAAT ACCTGCATTC CCAGATTGGA

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FIGURE 6 (115)

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TGGGAGCCTG AGACAGGAGG ATCACTCGAG GCCACAATTT CAAGACCGGC CTGGGCAACA	CCTTCTCTAC AAAAAAAA AAGCAGCCAC GTGTAGTGGC ACACACCTGT	ACTCAGGAGG GTGATTTGGG AGGATAACTT TAGTCCAGGA GTTTCAAGGT	TAACCTGGAC AGCAGAGTGA GACCCTGTCT	CTAAAAAAA AGAAAAAAA AATAATAATA ATAAAGAATA ATGGGCCTTG GGATACCCAC	TTGTGAAGCA GTTGAGTTAC ATATGCATGT CCAATGGATG	TATCAACTGG ATTGGAATGT GGCTTACTTG CGTGGCCACA ATGAGCTTCG	TGACAGGGTG AGAAGACAAA CTTCCTCACC CAGTCACTGG CAGAGCTGGA	TTACTGCATG GAGGTGGATG AAAAAGTCAA	CCGAGAACAG GCTACTCCAA AAAGCAGAGC ACCAAAGGCA CCAGCTGGTC AGGTCCCCCT	TCCTAAGTAA ACAATCACGT AATTCATTCG GGACAAAGCC AGAGAGGTGG TGTGGAGAAA
CAAGA	GTGTA	TAGTC	AGCAG	ATGGG	ATATG	CGTGG	CAGTC	GAGGT	CCAGC	AGAGA
GCCACAATTT	AAGCAGCCAC	AGGATAACTT	TAACCTGGAC	ATAAAGAATA	GTTGAGTTAC	GGCTTACTTG	CTTCCTCACC		ACCAAAGGCA	GGACAAAGCC
ATCACTCGAG	AAAAAAAAA	GTGATTTGGG	CACTGTACTC	ААТААТААТА	TTGTGAAGCA	ATTGGAATGT	AGAAGACAAA	CTCTCCCACA GAACAACCTC	AAAGCAGAGC	AATTCATTCG
AGACAGGAGG	CCTTCTCTAC	ACTCAGGAGG	GTGATTGCAC CACTGTACTC	AGAAAAAAA	CTGCTCTGAG	TATCAACTGG	TGACAGGGTG	CTCTCCCACA	GCTACTCCAA	ACAATCACGT
TGGGAGCCTG	TAGTGAGACC	AGTCCCACAT	GCAGTGAGCT	CTAAAAAAAA	TCCTCTTTT	AGGTTGAAAA	TAACACTTCC	CACTCTGTGT	CCGAGAACAG	TCCTAAGTAA
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FIGURE 6 (116)

FIGURE 6 (117)

TTTCCTCCCA AGTTTTTCCT GGAATTCTTT ATGGGAATAT GAGGTTTAGG	TCCCCAGCTC TATTGGTAAT AGGAAATCGC	ATTTCCTCAG CTCGTTCTGC CTCCTACTTG GCTGAGTGGA	ATGGAACCAT CTGTGGCTGC TGCATATGAT ATTGTCAACT TTGTCATTCC ACACCCACTC	TCATAAGACT CCCTTTAAAG TGTTCCTTTA AAAAAAAAA	TTCTATAAAA TACAGCTCAA TGTCAGAACC CTTGTCTTGT	TATTCTCTCT ATTTCCCTGT AGGGTCCCAT	CCAGGCCAAA GTGAGTGCCA GCCTCATTTG GGCAGCACAT GCCCTGTGGA AGGGCAGGAA	GAGACGAAAG CTAATTGTAA CTTTGTGATT AGCTGTCATG GATGCCTGGT CCTGTCAATA	GCGCTCAATA AAGCCAGAAG GCCAAGCGTT CGCTTCTGCA TACTGATTGC TGAGTCAGAT	ттетерстве варадаатт тетрадерат саатттада ататтаате тасттета
AGTTTTTCCT	CAGTGAAGAA	ATTTCCTCAG	TGCATATGAT	TCATAAGACT	TACAGCTCAA	TTGGGCAGCT	GCCTCATTTG	CTTTGTGATT	GCCAAGCGTT	TCTAGGCAGT
TTTCCTCCCA	GGAATAAGAC TTCCCTTTAA CAGTGAAGAA TCCCCAGCTC	TTACAAGGAT CATGGGGAGT	CTGTGGCTGC	CTTGACGCCC TACCATGTGG	ТТСТАТАААА	ATGTAACCCT TTCACAATGT	GTGAGTGCCA	CTAATTGTAA	AAGCCAGAAG	AGAAGGGCTT
GAGAGGGCAG	GGAATAAGAC	TTACAAGGAT	ATGGAACCAT	CTTGACGCCC	TGTGTTTTGT	ATGTAACCCT	CCAGGCCAAA	GAGACGAAAG	GCGCTCAATA	TTCTCAGTGC

FIGURE 6 (118)

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GTGGTTAAAA	GTGGTTAAAA TCCCTAGCTG	GTCTTTAATC	TGAGCCTGGA GAATTTAGTT	GAATTTAGTT	AGGGCTGACA
TTCTGCTGTG	TTCTGCTGTG ATATTTTTGC CCTCAATATA TATGTCTTTC CTCCATCTCT TAGATCCCTG	CCTCAATATA	TATGTCTTTC	CTCCATCTCT	TAGATCCCTG
AATCATAGAG	AATCATAGAG ATATATATGT	TATATAATCA	TATATAATCA ACTGTCTCCA GTCTCTAAGA GTGATAAGTA	GTCTCTAAGA	GTGATAAGTA
CACATTGTGT	CACATTGTGT CAGGTTGAGG GGACAGGAGA ACTTTCAAAA GCCTTTCTTG CCCCTTTTTC	GGACAGGAGA	ACTTTCAAAA	GCCTTTCTTG	CCCCTTTTTC
CTTCTCACTG	CTTCTCACTG CCTCCCACTA AGTCCAGCCA	AGTCCAGCCA	CTTATTATTC AGCTGACACT	AGCTGACACT	ATCATCATGA
CCATGAGTCT	CCATGAGTCT TTTGGGGCTA CCCTGGTTCG GATCCTTTTG GAGGTTTGTT GCTTAACTCT	CCCTGGTTCG	GATCCTTTTG	GAGGTTTGTT	GCTTAACTCT
GTCTTCAGTC	CTATGGAGCT	GCTTTTTCAA TAAGTTTCTA TTTTGGCTAA AGTTGGCCAG	TAAGTTTCTA	TTTTGGCTAA	AGTTGGCCAG
AATCTCCTTG	AATCTCCTTG TAACCAAAGA ACAAATAAAA TACCAGCTTG CAATGTTCTA TGTTGCTTCC	ACAAATAAAA	TACCAGCTTG	CAATGTTCTA	TGTTGCTTCC
ACCAAACTTA	ACCAAACTTA TGCAGCACTT	CCTATCTAAT CCACCTACTA GTCTTTTTT	CCACCTACTA	GTCTTTTTT	TTTTATTT
TTTGGAGACG	TTTGGAGACG GAGTCTCGCT CTGTTGCTCA GGATGGAGTG CAATGGTGCA ATCTCGGCTC	CTGTTGCTCA	GGATGGAGTG	CAATGGTGCA	ATCTCGGCTC
ACTGCAACCT	CTGCCTCCCG	CTGCCTCCCG GGTTCAAGCA ATTCCCCGGC CTCAGCCTCC TGAGTAGCTG	ATTCCCCGGC	CTCAGCCTCC	TGAGTAGCTG

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AAATCATTTT	GATAAATAGA	AAAAGGGCTA	AGTCTCTTCA TGAGGACTAA GCCCCATAGT AAAAGGGCTA GATAAATAGA AAATCATTTT	TGAGGACTAA	AGTCTCTTCA	
TACCTATGCT	CTACACTGTG	CCTCCCCAAC	CGTGGCTTGG GGGTTAATGC TTGATCATTT CCTCCCCAAC CTACACTGTG TACCTATGCT	GGGTTAATGC	CGTGGCTTGG	
TCTGATGCTC	ACCTCAGCCT	TGTTATCAGG	GACCCAGAGA AACATGTTTA AATGCTGTCC TGTTATCAGG ACCTCAGCCT TCTGATGCTC	AACATGTTTA	GACCCAGAGA	
ACTAAAAGAG	CCCCATAGTA	ATGTTTCTAT	CGGAGAAAGC AGGTAGCTTT ACTTGCAGCT ATGTTTCTAT CCCCATAGTA ACTAAAAGAG	AGGTAGCTTT	CGGAGAAAGC	
ATTGGAGTAC	AAACATCTCC	CAATAATTTC	CAGCATTTCT CAATAATTTC AAACATCTCC ATTGGAGTAC	TCTTTATCCC	ATTTTTCCT	m 1. ac
TCATTGCTCC	CATTATTGAT	ACACAACTGG	GCACCTAGCA GTGTCTTTCA CAGAGGAAGT ACACAACTGG CATTATTGAT TCATTGCTCC	GTGTCTTTCA	GCACCTAGCA	
AGATATCACA	ATCCATCTGT	CCCATGTTCT	GGTCTTCTCA AGGGTATTGG CCCATGTTCT ATCCATCTGT AGATATCACA		AATAAAATGT	
TGTTTCCTCA	ATGCATGTCT	GTCTGTTTAT	CTTCCTTCTA TTGGGTAATT GTCTGTTTAT ATGCATGTCT TGTTTCCTCA		TTAGTGTTTG	
CTACTAGTCT	TGGCCCCGAC	CCACCTCACC	GCTGGGATTA CAGGAGTGAG CCACCTCACC TGGCCCCGAC CTACTAGTCT	GCTGGGATTA	CTCCCAAAGT	
CCTCCTCGGG	GGCAATCCGC	CCTGAGCTCA	GCCCAGGCTG GTCACGAACT CCTGAGCTCA GGCAATCCGC CCTCCTCGGG	GCCCAGGCTG	TCACCATGTT	
AGAGAGGTT	ATTTTAGGAG	TAATTTTTGT	GGACTACAGG TGCATGCCAC CACGTCCGGC TAATTTTTGT ATTTTAGGAG AGAGAGGTT	TGCATGCCAC	GGACTACAGG	

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FIGURE 6 (119)

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TTCTCTTTTC	CTAGTGATCT	TIGCCICACT	ATGGCTCTCT CCCATTTCTG TTGCCTCACT CTAGTGATCT TTCTCTTTTC		GGTTCCTTAT
TACTAAGCTG		AAAAGCTTCT	TATGCCCTGT AAAAGCTTCT GCAGGGTTTC	CCTGAGGCCA	ACTGCTTGTA
CAGCTTACTC	TTGCTTTTCA	AGCCTTGTAC	TGGTGGGTGC TTTTATCTTA AGCCTTGTAC TTGCTTTTCA CAGCTTACTC		GGGACTCTAC
AAAGAACATA	CACACAGGAA	AACAAAGTAG	TTAATTTCAC AAATGCTTCC AACAAAGTAG CACACAGGAA AAAGAACATA		GATGTCTTCC
GGTTTTTT	TGCTAAAAAT	CACTATATCA	GGGCAAGGGC	AGGTAGGGCT AAGCAAACAA GGGCAAGGGC CACTATATCA TGCTAAAAAT GGTTTTTTTT	AGGTAGGGCT
GTTAGGATGA	TATGGGAGGA AAGAGTGCAT	TATGGGAGGA	GGTAGAGTCT	TGGTAGCGAT GGTAGAGTCT	CCTGAGGTGG
CCTTCCTGTC	GGATGGGTCA	GATTAGTCCA	TCAAATTCTA GGAATACTAG GATTAGTCCA GGATGGGTCA CCTTCCTGTC	TCAAATTCTA	AGAATTGTTC
TGGGAACAAG	CTCACAGAGA GGGCAGGATG GAAGGGGCTT TGGGAACAAG	GGGCAGGATG	CTCACAGAGA	ATATTGGCTC ATGTAACCTT	ATATTGGCTC
AAAGGAAAAT	ACGTAAGTCA	ATTCAAACCA	CAGAAACTCA	GGACCATGGA TTGCAAGTGA CAGAAACTCA ATTCAAACCA ACGTAAGTCA AAAGGAAAAT	GGACCATGGA
ATATAGTTCA	ATTAACGTGC ATATAGTTCA	TGAAAAATAT	AAAAAGAGAG	TTTATTTGTA TGAGAAAAAG AAAAAGAGAG	TTTATTTGTA
TAAGCACATC	TTGTTTAGGA	TTACTGGTGT	ATACTGAGTA	ATGTAATTAT AAGAATGAGA ATACTGAGTA TTACTGGTGT TTGTTTAGGA TAAGCACATC	ATGTAATTAT

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FIGURE 6 (120)

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CTCACCTCTG GGACTGGTGG CTGTTTGTAT GGACTGCCTT AGCTTTGCTT TGGGTTTTTT CCTGGGGACA ATGTCTTCAG ATTATCCTAG ACCAAATAAA CTACAGCCAC TGGGCCAGGC TCTTCCTCCT CCAACTGGAC CATGTTCCTA GGGCTCTTCA CCTTAGTTTA GGTCAAGCAT TCTTGGCAAA AGAAAGGCCT AGTTAACAAT AGACATTCTA GCAATTGATT CTTTTTGACA TGTTGTAAGA TCTATTCACA TTTTGTAATT AAAGCATTCT GCAATTGAAA CCAACACGAA CTAAGCTGCT CCTGGAATGC AGGTGGCCT CCTCAATACA GGATGTTCTA GAGAGCTGTA TTTTGGGCAC TTAACTATTC TCCACTACTT AGGGCACAGC ACTGAAATTA ACACCACTAA GTTTGTCATG TCCATGTAGT TAGTCTCAGG CAGTGCAGCC TCAGGAGTGG AACTGACCTC TTATGTGTGTT CCAGCTTTC TTCCTTCAGA AGTCAGCTGT GTTTTCTGCT GACTCTCCAT AGGAACATCA GTCCTGAATC CTCAGACCAC CATCTGGAGT AGTAAGTGCT CCTGACAGTC	IT TGGGTTTTTT	AC TGGGCCAGGC	ra ggtcaagcat	IT CTTTTGACA	AA CCAACACGAA	TA GAGAGCTGTA	TA ACACCACTAA	GG AACTGACCTC	CT GACTCTCCAT	CT CCTGACAGTC	TCTACCGCTG GATCTCCAAA GCGTGTGACA CACCGTGAGA GAGAAATGAG
CTCACCTCTG GGACTGGTGG CTGTTTGTAT GGACTGCCTT CCTGGGGACA ATGTCTTCAG ATTATCCTAG ACCAATAAA TCTTCCTCCT CCAACTGGAC CATGTTCCCA GGGCTCTTCA TCTTGGCAAA AGAAAGGCCT AGTTAACAAT AGACATTCTA TGTTGTAAGA TCTATTCACA TTTTGTAATT AAAGCATTCC CTAAGCTGCT CCTGGAATGC AGGGTGGCCT CCTCAATACA TTTTGGGCAC TTAACTATTC TCCACTACTT AGGGCACAGC GTTTGTCATG TCCATGTAGT TAGTCTCAGG CAGTGCAGCC TTATGTGTGT TCACTGAATC TCCTCAGAAAGCTGT AGGAACATCA GTCCTGAATC CTCAGACCAC CATCTGGAGT	AGCTTTGC1	CTACAGCCA	CCTTAGTT	GCAATTGA	CCTATGGAA	GGATGTTC	ACTGAAAT	TCAGGAGT	GTTTTCTGCT	AGTAAGTG	CACCGTGA
CTCACCTCTG GGACTGGTGG CTGTTTGTAT CCTGGGGACA ATGTCTTCAG ATTATCCTAG TCTTGCCAAA AGAAAGGCCT AGTTAACAAT TGTTGTAAGA TCTATTCACA TTTTGTAATT CTAAGCTGCT CCTGGAATGC AGGGTGGCCT TTTTGGGCAC TTAACTATTC TCCACTACTT GTTTGTCATG TCCATGTAGT TAGTCTCAGG TTATGTGTGT CCAGCCTTTC TTCCTTCAGA TTATGTGTGT CCAGCCTTTC TTCCTTCAGA	GGACTGCCTT	ACCAAATAAA	GGGCTCTTCA	AGACATTCTA	AAAGCATTCC	CCTCAATACA		CAGTGCAGCC	AGTCAGCTGT	CATCTGGAGT	GCGTGTGACA
CTCACCTCTG GGACTGGTGG CCTGGGGACA ATGTCTTCAG TCTTCCTCCT CCAACTGGAC TCTTGGCAAA AGAAAGGCCT TGTTGTAAGA TCTATTCACA CTAAGCTGCT CCTGGAATGC TTTTGGGCAC TTAACTATTC GTTTGTCATG TCCATGTAGT TTATGTCATG TCCATGTAGT AGGAACATCA GTCCTGAATC	CTGTTTGTAT	ATTATCCTAG	CATGTTCCCA	AGTTAACAAT	TTTTGTAATT	AGGGTGGCCT	TCCACTACTT	TAGTCTCAGG	TTCCTTCAGA	CTCAGACCAC	GATCTCCAAA
CTCACCTCTG CCTGGGGACA TCTTGGCAAA TCTTGTAAGA TTTTTGGCCAC GTTTGTCATG TTTTTGGCCAC	GGACTGGTGG	ATGTCTTCAG	CCAACTGGAC	AGAAAGGCCT	TCTATTCACA	CCTGGAATGC	TTAACTATTC	TCCATGTAGT	CCAGCCTTTC	GTCCTGAATC	TCTACCGCTG
	CTCACCTCTG	CCTGGGGACA	TCTTCCTCCT	TCTTGGCAAA	TGTTGTAAGA	CTAAGCTGCT	TTTTGGGCAC	GTTTGTCATG		AGGAACATCA	CTAGAAGTTG

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FIGURE 6 (121)

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TTAGACTTTT		AAAGCATACT	CTTGCTCTTA	TGCCAAGTTA AGTGCCCAAG CTTGCTCTTA AAAGCATACT GGATTTTGTT	TGCCAAGTTA
ATGGTACAGG	TTTGGCCTGT GGTCCCTACG TAGAAAGGAG GCTTTGTCAT AAAGTCTTAT ATGGTACAGG	GCTTTGTCAT	TAGAAAGGAG	GGTCCCTACG	TTTGGCCTGT
TGGTGAGCTT	AATTCTTTAT GATGAGAACT ATCTTGACTC AAGTGGACAG TGGTGAGCTT	ATCTTGACTC	GATGAGAACT	AATTCTTTAT	AAAGTATTTG
AATCTATTAA	AAAAAGAAAC CATGTGAAAG TCAAAATATT TGTTTAATCA GGTCATTGAG AATCTATTAA	TGTTTAATCA	TCAAAATATT	CATGTGAAAG	AAAAAGAAAC
TAAAAATAAG	TTGCTCAATA TAAAAATAAG	CAAGCTGGTT	ATTAGAAGAA	CAAAAACTAC AATCTATGTA ATTAGAAGAA CAAGCTGGTT	CAAAAACTAC
AGCTAAGGAA		CTTATCATAA GGAAGTCATT	TCTCTGCTCA	AATAGACTGA TCTGTCCATT	AATAGACTGA
GATTGGCTGA	GTGATACAGA AGTCTTTTCT CCACAGGTCT CATATGTAAA GAATTCATTA GATTGGCTGA	CATATGTAAA	CCACAGGTCT	AGTCTTTTCT	GTGATACAGA
ATTGAGCAAT	TAAAAGGGGT	GGCTTACATA	TAAGGCTCTT	TTATATGCAC	CGTAAATGTT
GCTTCTTAAG	TTGCTAATAC ATATCTATTA TGAGAGCTGT GCTTCTTAAG	АТАТСТАТТА		CTCTCATGCA ACACTTGGCT	CTCTCATGCA
ACACAATACC	ATTTCTACAA TTTTCCCATA AGTCATCTAC ACACAATACC	TTTCCCATA	ATTTCTACAA	TTCACTGATA	TTATTTTGAA TTCA
TACTGCATAA	TTTCACAAGC CCCCTAATTT	TTTCACAAGC	AATCTTGCTT	AAAGCTGGGC TCTTCAGGTA AATCTTGCTT	AAAGCTGGGC

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FIGURE 6 (122)

FIGURE 6 (123)

AGTGAACTGA AGGGAATAAA CAAATCCCTC TGGGAGAACT TCTCCTCCAT CCTTGGTGAA

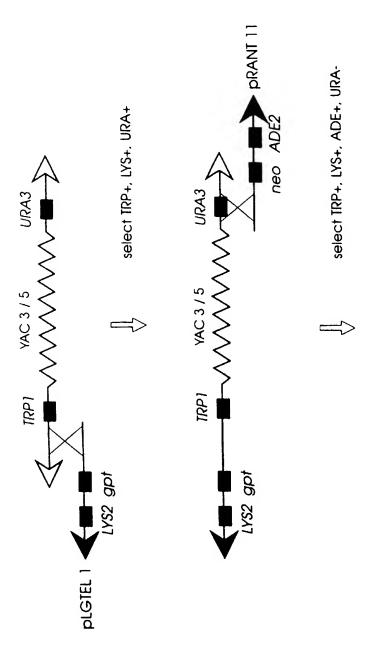
GTCATTCTGC CAGAATTC

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FIG 7(i)

FIG 7(ii)

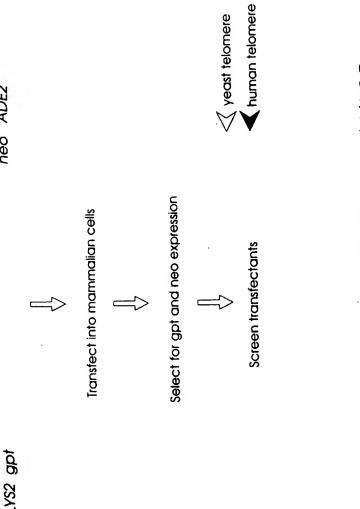
FIG 7



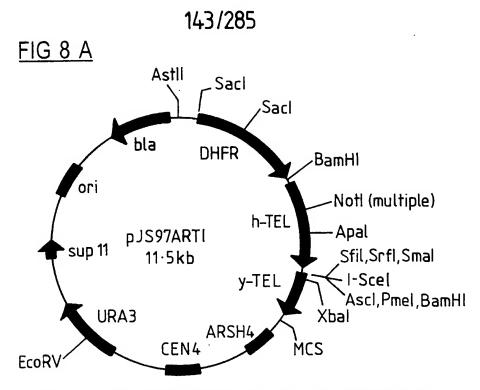
Procedure used to retrofit YAC 3 and YAC 5.

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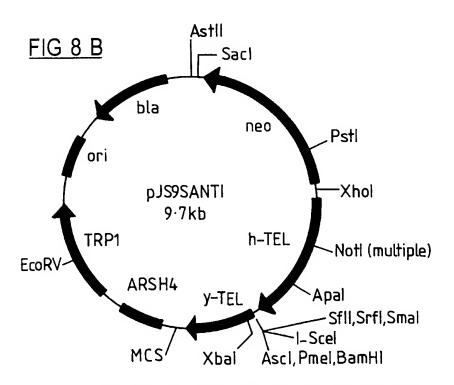
TRPI



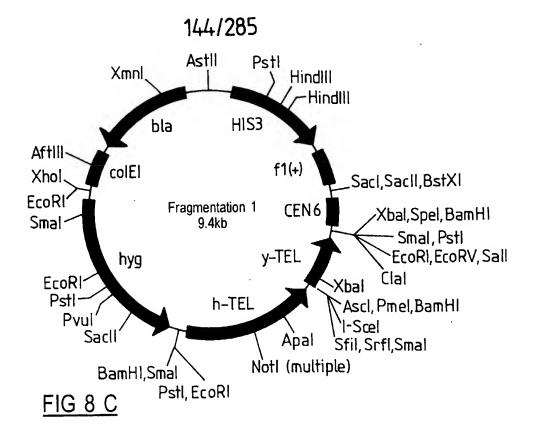
Procedure used to retrofit YAC 3 and YAC 5.

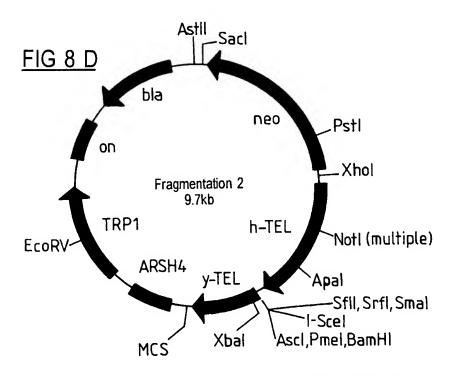


MCS = T7, EcoRI, Bglll, Notl, Xmalll, Sstil, Sall, Nrul, Nhel, BstBl, Clai

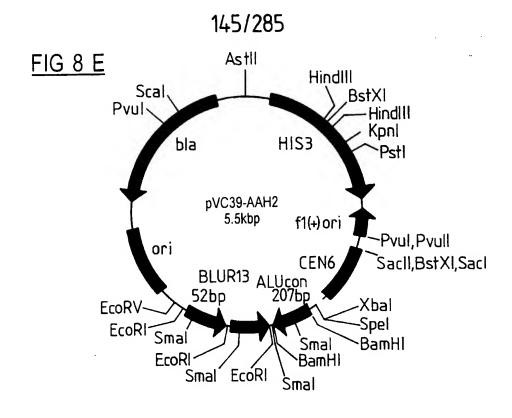


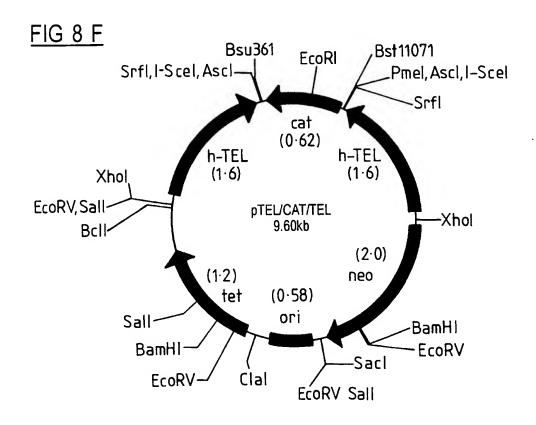
T7, EcoRI, Bgill, Notl, Xmalll, Sstli, Sall, Nrul, Nhel, BstBl, Clal

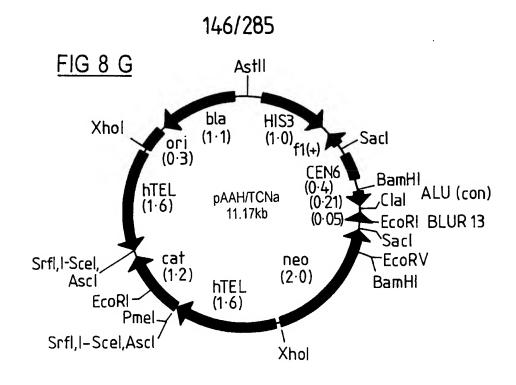


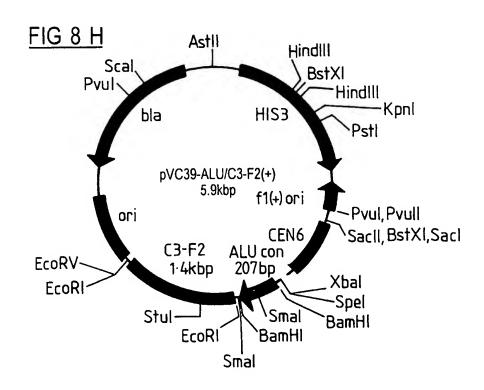


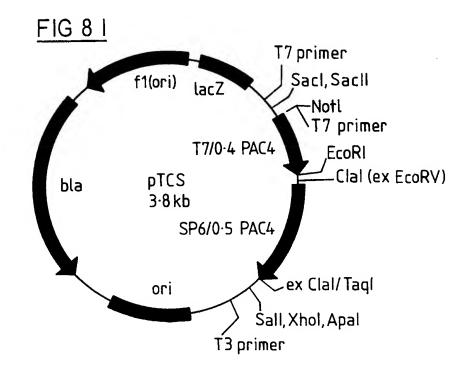
T7, EcoRl, Bglil, Notl, Xmalll, Sstll, Sall, Nrul, Nhel, BstBl, Clal

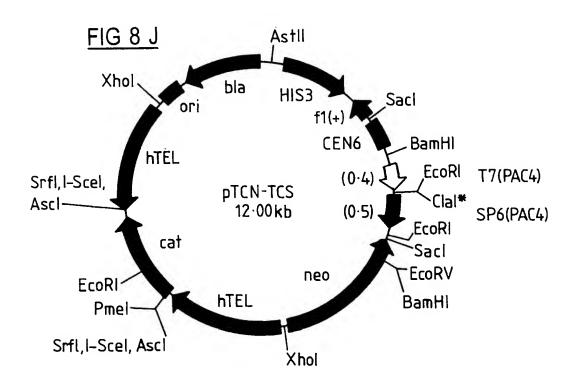








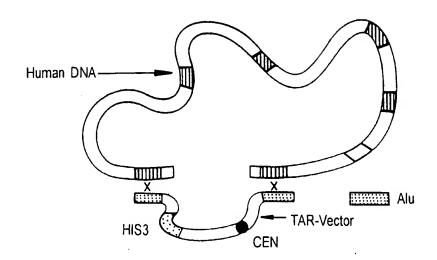




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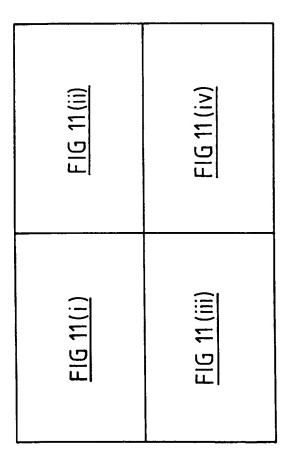
Circular TAR

FIG 9

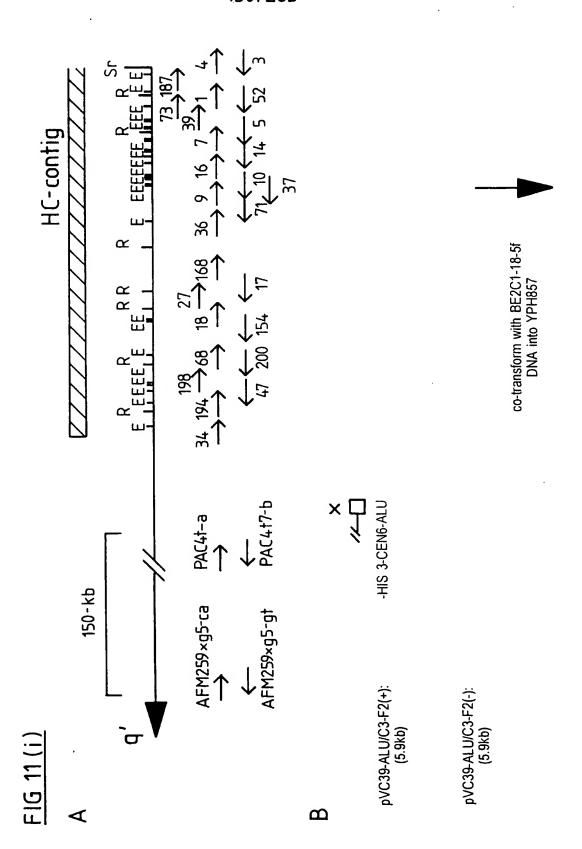


Shuttle YAC to HAC 1. Circular TAR to create YACs 2. I-Scel digest to create HACs TEL/I/TEL HAC

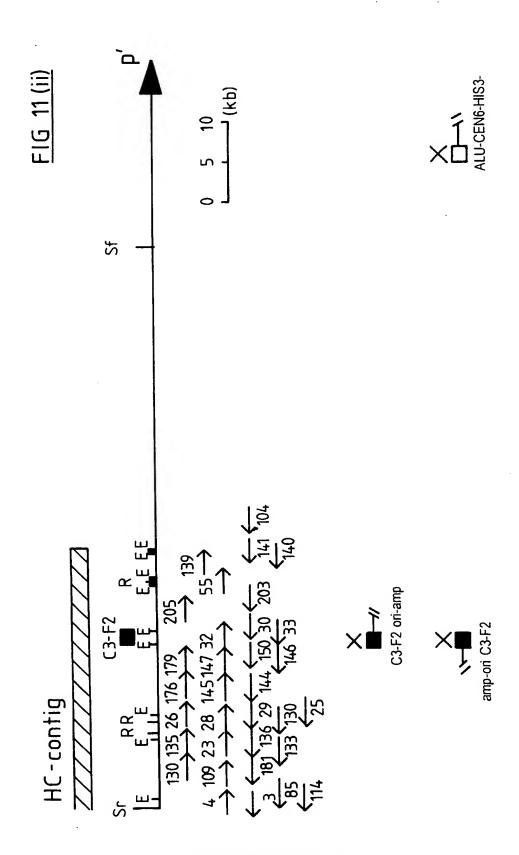
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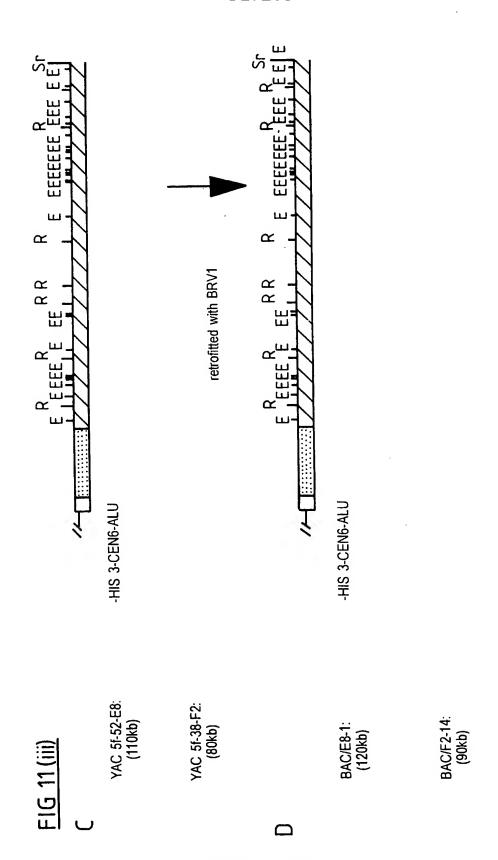
-16 11



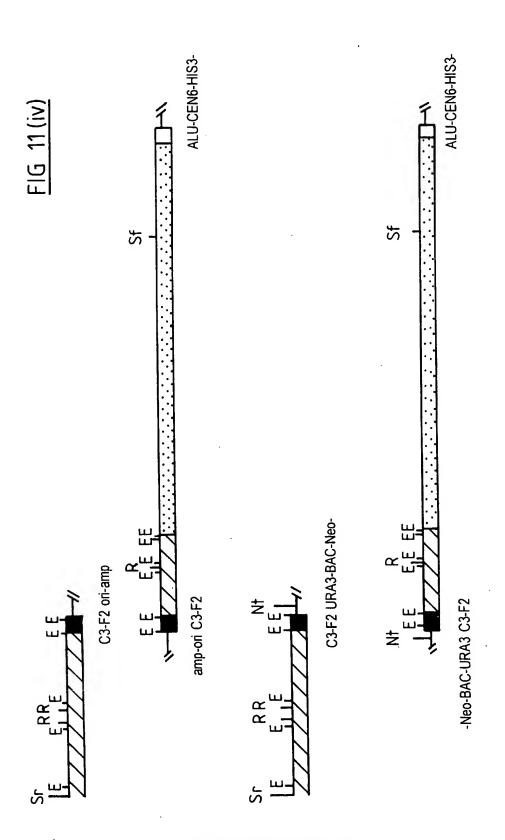
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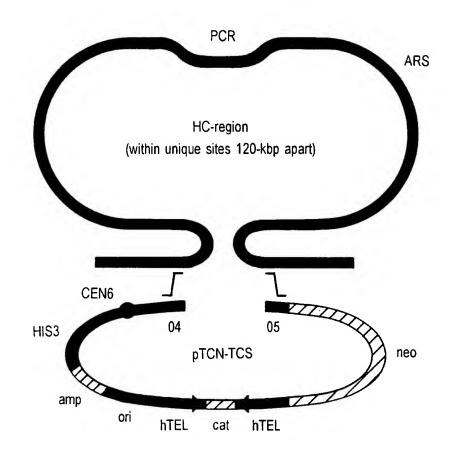
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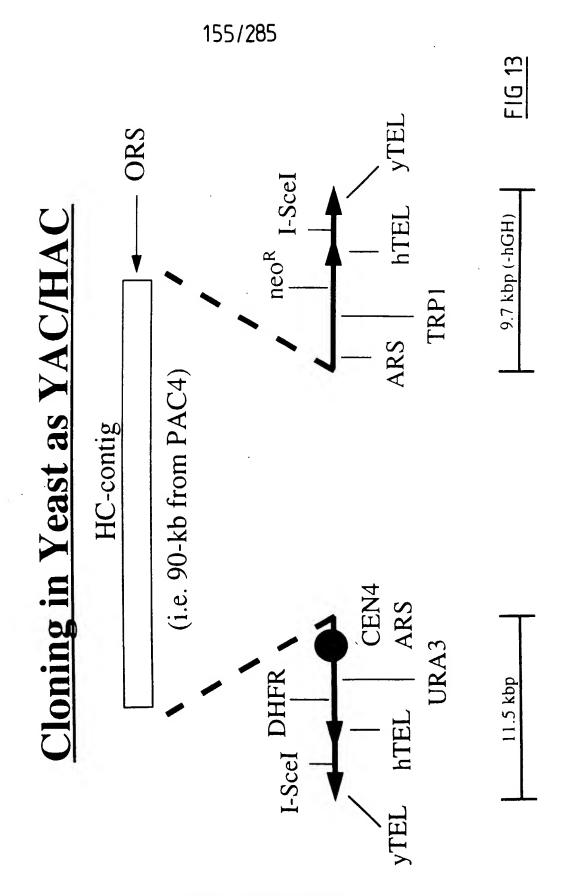
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Specific TAR of HC-region from mar (del) 10



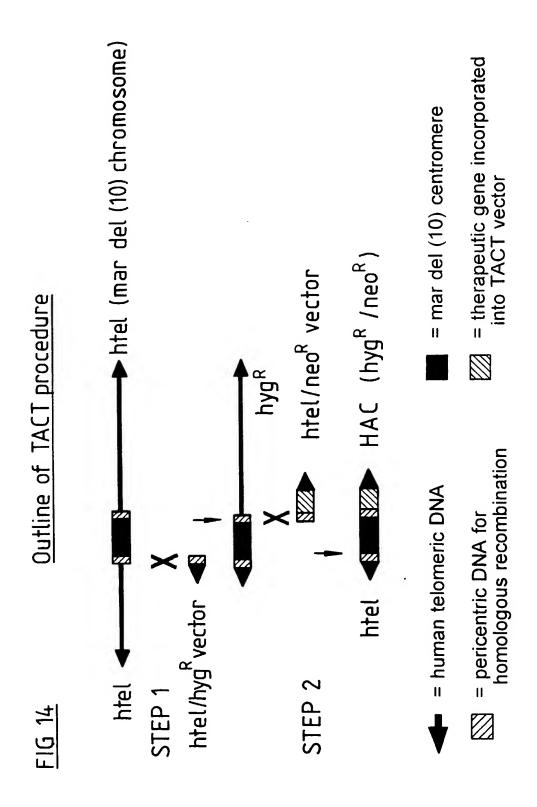
- 1. Co-Transformation into YPH857
- 2. Select for HIS+ colonies
- 3. Screen for HC-region by PCR
- 4. Prepare high-MW DNA
- 5. Digest with I-Scel to expose hTELs
- 6. Transfect HT1080 cells
- 7. Select for G418^R
- 8. Analyze by PFGE and FISH

FIG 12

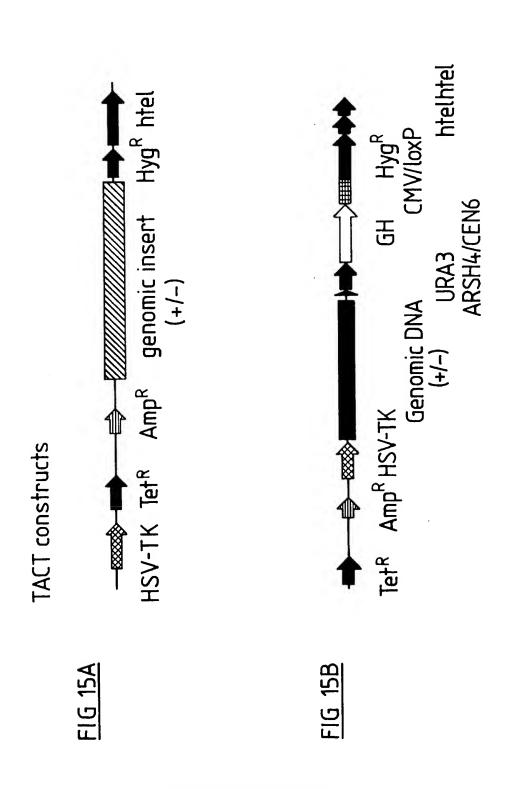


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FIGURE 16 (1)

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TGGTTGATTI	TGGTTGATTT GTNNATAAGG AAGTTTGGAA TCAATCCCGG AAGGAATTTT	AAGTTTGGAA	TCAATCCCGG	AAGGAATTTT	TTTTTAAAA
AATTTTTGG	AATTTTTGG AAGGGTTTGG		TAWTAAAAA RCCAATTTGG	GTTTTTAAAA ATAGGAATTT	ATAGGAATTT
TATGGGAAAA	TATGGGAAAA AATTTTCCCT	$\mathbf{T}\mathbf{T}\mathbf{T}\mathbf{T}\mathbf{T}\mathbf{T}\mathbf{T}$	TTAAGTTTTA	GATGTTATGT	TTCCTTATAC
TTAAAGTGGG	TGTCTTATAG GCAGCATATA TCTGGGTCTT	GCAGCATATA		GATGTATTAT	TTAATCTGAT
AATCTCAACC	AATCTCAACC TTTTTGTTGG AGTGTTTAGG CCATTTACAT	AGTGTTTAGG	CCATTTACAT	ТТАСТСТААТ	TATAGACATG
GTTTGATTTG	CTATACCATC	TTTTCATTTG	TTTTATATGT GAGCCATCTT	GAGCCATCTT	TTCATTGTTC
TTTTTTCATC	TTTGACCATT	TTCTTTAGTA CTGAATACTT	CTGAATACTT	TTTTGTATT	TCATTATATC
TATTGGCTTT	TTAGTTATAC CTCTTAAAAT	CTCTTAAAAT	TTTTTTTCT	TTTTTTTCT GTTTTATGTA GGATTTATAA	GGATTTATAA
TATACATCTT	TAACTTATCA CAGATTACCT	CAGATTACCT	TCAAATAGTA	TTTTACCAGC	TCAAGTGTAA
TGTAGAAACC	TGTAGAAACC TTACAAGAGT ATATTTTCAT	ATATTTTCAT	TTCTGTCTCC	TTCTGTCTCC TAATTTTTAT GCTATTGTCT	GCTATTGTCT
ATAATACATT	AGGTTTGTTG	TTGTTTGTTT	TTACCTTATT	GCTGTTGGCT	GGGGTCAGCA

SGGTTTGGT	3TGAGTCAC	STAGTCTGT	rgctttatt	TGCTGGTGGA	rggctgtgg	TCATGAAAGA	FTCTTTGAA	PATAATATT	FAGATTCCA	ATCTGTTCAA
AGGGCT AGATAGTACA GGCATACCTT GGAGATACTG TGGGTTTGGT	ATAATA CAAATATGCA AGAAGTGGAT ATCACAATAA AGTGAGTCAC	TATACTACAC TGTAGTCTGT	TGTTAT GTCTAAAAA ACACATACCT TAATTTTAAA ATGCTTTATT	GTAATCTTTT TO	TTATTGATGA CTGATCGGGG GTCAGGTGCT GAAGCTTAGG GTGGCTGTGG		CTTTTTGATA GCATTTTATG CACAGTAGAA CTTCTTTGAA	TGCTTTAACA ACCTAAGTTA ATATAATATT	TCAACAATTT TCACAGTGTC TTCACCAGGA GTAGATTCCA	GAAATTCCTC A
GGCATACCTT	AGAAGTGGAT		ACACATACCT	TCAGTGAGTT	GTCAGGTGCT	GAAGATTGCA ATATCAGTTG ACTCTTCCTT	GCATTTTATG	TGCTTTAACA	TCACAGTGTC	ATGGAA TCTTTGCTCA TCCATAAGAA GAAATTCCTC
AGATAGTACA	CAAATATGCA	TTCCCA GTGCATATAA AAGTTTTGCT	GTCTAAAAAA	ATTTGAGCAT	CTGATCGGGG	GAAGATTGCA	CTTTTTGATA	CTCTCA AACCCTGCTC	TCAACAATTT	TCTTTGCTCA
GTAAAGGGCT	CACAATAATA	TGGCTTCCCA	ATAGTGTTAT	GCTAACAATC		AAACAACAGT	GTGTGTGATG	AATCCTCTCA	GTCATT	TGAGATGGAA
AACATTTTCT	TCCATACCAC CACA	ACAAGTCTTT	TCAGTGTGCA ATAG	ACTAAAAAT	AGGTCTTTTC	CAGTTTCTTA AAAC	TTTCTCTCTA GTGT	AATTGGAGTC	CTGAATCCAT TGTT	TCTCATTTCC
			SUE	BSTITUT	E SHEET	`(Rule 26)			

	FIGURE 16 (3)					
	GTTTTATCAT	GAGATTGCAG	GTTTTATCAT GAGATTGCAG CAATACAGTC ATGTCTTCAG GCCTCACTTC ACTTTTAATT	ATGTCTTCAG	GCCTCACTTC	ACTTTTAATT
	CCAGTTCTCT	TGCTGTTTCT	ACCACATCTG	TGGTTCCTTC	CTCCATTGAA GTCTTGAACC	GTCTTGAACC
	TCTCCAAGTC	ATCCATGAGG	ATCCATGAGG GCTGGAATCG ACTTCTTCCA AATTCCTGTT AATATTTATA	ACTTCTTCCA	AATTCCTGTT	ААТАТТТАТА
SUE	TTTTGACCTC	CCATGAATCA	TITIGACCIC CCATGAATCA TGAATGTTCT TAATGGCACC TGGAATGGTG AATCCTTTCC	TAATGGCACC	TGGAATGGTG	AATCCTTTCC
STITUT	AAAAGGTTTT	CAATTTACTT	AGTCCAGATC	CATCCATCCA GAGGATCCAC TTTCAATGCC	GAGGATCCAC	TTTCAATGCC
E SHEET	AGTTATAGCC	TTATGGAATG	TATTTCTTCA	TATTTCTTCA ATAATAAGGC TTGAAAGTTG	TTGAAAGTTG	AAATTACTCC
'(Rule 26	TTGATCCATT		TICTGCAAAA TAGATGTTGT GTTAGCAGGC ATGAAAGCAA CATTAATCTT	GTTAGCAGGC	ATGAAAGCAA	CATTAATCTT
)	TTTGTACATG	TCCATCAGAG	CTCTTGGGTG ACCAGGTATA TTGCCAGTGA GCAGTAATAC	ACCAGGTATA	TTGCCAGTGA	GCAGTAATAC
	TTTGAAAGGA	ATTATTTTC	TTAGCAGTAG	TTAGCAGTAG GTCTCAACAA TGGGCTTAAA ATATTTGGTC	TGGGCTTAAA	ATATTTGGTC
	CACCATTCTG TAAACTGATG		TGCTGTCATC TAAACTTTGT AGTTTCATTT ATAGAGCACA	TAAACTTTGT	AGTTTCATTT	ATAGAGCACA
	GGCAGAGTAG	ATGTAGCATA	ATTCTTAAGG GACTTAGGAT TTTCAGAATG GTAAATGAAC	GACTTAGGAT	TTTCAGAATG	GTAAATGAAC

TATTT	CTAAATGGCA	GTGTAGCCAC	CAGCATT	CATGAAC	AGCCTTCATA	3TTGTGG	3CTGTTT	3ATATAT	ATCTTGG	ATGAGAG
AGC(CTA	GTG	CAT(CCT	AGC	AAT	AAG	CAA(ACT	AAA
TAGCCCCCAA CAAGAGAGTC AGCCTATTTT	TACAAAAGTC		CTATCT AAATCTCTTG GATAACTTGT GCAGCTTCTA CATCAGCATT	TTATGTAATG GAGTGGCATC TTTCCTCGTA CCTCATGAAC	CGCCTCTCTC	CTTGCTTTGG ATTAGATTTT GGCTTCAGGA AATGTTGTGG	TATCCA GACCACTAAA ACTTTATCCA TATCAGCAAT AAGGCTGTTT	TAATTTGCTT CAAGATATAT	AACTTG GCTGACTGGT GCAAGAGGCC TAGCTTTCAG ACTATCTTGG	TCCTCA CTAAGCTTAA TCATTTCTAG CTTTTGATTT AAAATGAGAG
	CCAAGC GTCGACTTCT CCTCCCTGGT TACAAAGTC	GTTTTATCTA CATTGAAAAT CTGTTGTTTA	GATAACTTGT	GAGTGGCATC	TICCAA CTITICIICI GIAGITICCI CGCCICICIC	ATTAGATTTT	ACTTTATCCA	TIGIGI GIICACIGGA GIAGCACIIT	GCAAGAGGCC	TCATTTCTAG
CTAGCTGTAT	GTCGACTTCT	GTTTTATCTA	AAATCTCTTG	TTATGTAATG	CTTTTCTTCT	CTTGCTTTGG	GACCACTAAA	GTTCACTGGA	GCTGACTGGT	CTAAGCTTAA
ATTTAAATCA	GAAGCCAAGC	ATATAAGGCT		CCTTGTACTC	TAGC	TAGTTAGAGA	CTTCTATCCA	TTATTTGTGT	TCACAACTTG	GCCTTCCTCA
ATTGGCATCA ATTT	TTGAAGCTTT GAAG	TCTTCTTCCA	CTTCATCAAT GATA	TGCTACTTCA	CAACCTCTGC	GACTTGAGGA	CTGGTTTGAT	TGCTTTCTTA	TTCTTTGCAT	CTTTTGACAT
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ATGTAGGCCA GGCACAGTGG CAGGCACAGT GGCATATGCC TGTAATTCCA ACACATTAAG TAATTTCAAT CTCAGAGAAT AGGGAGGTCT GAAGAGAGGG AGAGAGGTGG GGGAATGGCT CTTATATGGA CAAATATCAC TGATCACAGA GTGACACAGA GAAACAAAGT GAGCACATGC TGTTGGAAAA AATTGGTGTT GATAGACTTG GTTGTAGAGA TCACACCACT CTGGATGACA GAGCAAGACC CTTTCTCAAA ATAAAATGAG AGGTGTGCTT TCACCATAAC AGATATAAGA ATCATGGAAA AGTTTGAAAT ATTTTGAGAA TTAGCAAAGT CGCCTTCAAT TTATAAAAA CACAATATCT AGGAAGTTCA CCTGTAAATA TTTCAGGCTT TCCAGACCAT TTAATTGGCC TGTTTGCTGT AGGCCAAGGT GGGAGGATTG CTTGAACCCA GGAGGTGGAG GGTCAGTGGA GCAGTCAGAA CACACATAAC ACTAATAAAT GATGCCCCCA AACAATTACA ATAGTTACAG TTTGAGCCCA TAGAAGCCAT AGTATGATTT GTGCAATAAG ATGAAGTATG GTTTGCCATA GCATTCCGTC ACTGTTGTGT CTTCTTTTG TGTGGTTTGT ATAAAGTGAA CTCCATGTAA

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FIGURE 16 (5)

FIGURE 16 (6)

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татааатсса	TCTGGCT	TAGCAGTTTG	TCTTTGA	ATTTGGGGTG	CAGCTAT	GTGACTC	CTTTCTT	ACTGATTCTT	TTTAATATCA	CTACTCA
	TCJ		ATT		TTJ	TC1	CTG			TCJ
TTGCTGGGTA	CTTCAGCACT TTAATGAAGT CACTCAGTTA TCTTCTGGCT	CTTTAATTTT	CTTTGTATTT ATCCTTTTGG GGGCCTCTTA ATTTCTTTGA	CTTTCCCCCC	TTTGGAAAAT TTTCAGCTAT	CTACTCTATG CTCCCTCCT CCCCTTTCCT TCTGTGACTC	CTTGGATGCT	CTTCAAGTTC	ATCCTTTGTC	TTCATGTAAC TCTTTGTTCT GGTTTCCATC TCTCTACTCA
AAATATACTT	TTAATGAAGT	TTTTCATTGT	ATCCTTTTGG	TTTTTTAAAC CATTTTGGGT	AAAAACTAAT	CTCCCCTCCT	GTTCACGGCA	GATAATTTCT ACTGACCTAT	TGTTGAAGAA	TCTTTGTTCT
TTTGTTTTG	CTTCAGCACT	CTTCAAGATT	CTTTGTATTT	TTTTTAAAC	TCATAGTTTA	CTACTCTATG	CATTTTATTT	GATAATTTCT	GCTCAACGCC	TTCATGTAAC
GAAAAAGTTT	CTTCTCTTTT	CTCTGGCTGC	ATGTGTCTAG GAGTGATTTT	CTTTTTTT	AAAAAAAA AAAATAAAA TCATAGTTTA AAAAACTAAT	CATTTCTTCA AATATTTATC	AAATTACAGG TATATTTAAC CATTTTATTT GTTCACGGCA CTTGGATGCT CTGCTTTCTT	TTTCATTTTG	TTCTCAGTCA TGTCTAGTGT GCTCAACGCC TGTTGAAGAA ATCCTTTGTC	TTCTAGCATT
TTATTTGTCT	TGTTGCATAA	TGTATAGTTT	ATGTGTCTAG	TCCTTTTTT	ааааааааа	CATTTCTTCA	AAATTACAGG	ATTTTTGTC	TTCTCAGTCA	TGTTTTTAT
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FIGURE 16 (7)

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FIGURE 16 (8)

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	FIGURE 16 (9)					
	TGCACCAGAC	TTCCATTCAC	TGCACCAGAC TTCCATTCAC TGCAAGAGTG GGCTGCTGCG CTTTGTGATT	GGCTGCTGCG	СТТТСТСАТТ	CATGTGAGGC
	CTGAATTGTG	CTGAATTGTG GAAGGGTTTT	TCCTTAGTGT	GTCCCTCCAT	GCTCAGATTT	CAGCAAGTCT
	TCATATCTGT	GCCACAGAAG	TCATATCTGT GCCACAGAAG GAATCTGACC CATGCTCTTT	CATGCTCTTT	TTGACCTCCC CAAGTGATCA	CAAGTGATCA
SUF	ACTGTTGCTT	GTTATAGCTT	GTCATGGAGT AAGAGGGTGT TTTTTTAGTT TTCATCCTCC	AAGAGGGTGT	TTTTTAGTT	TTCATCCTCC
STITUT	AGCCTTGGTC	TTGGGCCCTG	AGCTCCTAGA	CTCCAGGAGT	GGATGGAATC	CAGTGATTTC
E SHEET	TCAGTAATTC	TCAGTAATTC AGCCCCTTCT	CCAGTAGTGG CAGATCTCTG	CAGATCTCTG	CTTTGTATCA GTGCAAGATC	GTGCAAGATC
Rule 26	CTGGGCTGAG	CTCATTTTCT	CTGGGCTGAG CTCATTTTCT GCCCTTCCTC GAGTGGCAGA CAGCTCTTGC TTTCACCCTT	GAGTGGCAGA	CAGCTCTTGC	TTTCACCCTT
3	CTACCAAAGG	CAGTGCATCT	TTTCTTGGGC	CTCTCCCCAT	TGAACTTATG	ACTTTCACAT
	AAGAGAAGGG	CTCATGTATC	AGAGAATTCT	GTGACTTTGT	GCCACATACA GAGTCTCTCA	GAGTCTCTCA
	GTTCTCTTGC CCTGCCCCAG	CCTGCCCCAG	TCTTTTTTGT GAGCACCTAG TAGAGACCCT TGGAGAAGAG	GAGCACCTAG	TAGAGACCCT	TGGAGAGAGAG
	CAAGGAAGCG	AGTATGGACT	TCTTTTGTGT CTGTCGATTG		CTTTGTTTCT CAACTGCTAC	CAACTGCTAC

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TTAAAATTTC AGCTGTTTTC TTTTTTTTTT TCGTTTTTCT	TIGCICIGII GCCCAGGCIG GAGIGCAGIG	GGCTTGCTGC AACCTCCGCC TCCCGGGTTC AAGCGATTCT CCTGCCTCAG	таатт тттстаттт	AGGGTTTCAC CATTTTGGTC AGGCTTGTCT CAAACTCCTG ACCTCATGAT	ATTACAGGCA TGAGCCACCG CGCCAGGCCT	CTTTTTACCT GCTGGGATGG CTAGTTTTCT GTGTCAACTT GACTGGGCCA	TTTCTGTGAG GGTGTCTTCA	CCTGT CTAGTAGGGG	CCAGTCTGTT GAGGACTTGA ATAGAACAAA AGGCAGGGGA AGGTTGGAAT	CTGCTTGAGC TGAGACATCT ATCCTGCCCT TGGCACTCCT GGTTCTCAGG
$ extbf{T}$	GCCCA	AAGCG	CTGGC	CAAAC	TGAGC	GTGTC	TTTCT	AGGGC	AGGCA	TGGCA
AGCTGTTTTC	TTGCTCTGTT	TCCCGGGTTC	ACCACCACAC	AGGCTTGTCT		CTAGTTTTCT	TTTCTGGGTG	TGGTGAACTA AGTAAAGCAG AGGGCCCTGT	ATAGAACAAA	ATCCTGCCCT
TTAAAATTTC	AGATGGAGTC	AACCTCCGCC	ACAGGTGCCC	CATTTTGGTC	AAGTGCTGGG	GCTGGGATGG	TTAAACAGTA	TGGTGAACTA	GAGGACTTGA	TGAGACATCT
TAAGAATTCA	TTTTTTTT AGATGGAGTC	GGCTTGCTGC	AGTTGGGATT ACAGGTGCCC ACCACCACAC CTGGCTAATT	AGGGTTTCAC	CAGCCTCCCA AAGTGCTGGG	CTTTTTACCT	TGGGATGTCC AGATATGTAA	GCATTTGAAT	CCAGTCTGTT	CTGCTTGAGC
TCTTGGACTT	TTTTTTTT	GTGTGATCTT	CCTCCCAAGT	TAGTAGACAC	CTGCCCGCCT	CAGCTGTTCT	TGGGATGTCC	GAAGAGATTT	TAGGCATCAT	TGCCCCCTCT
			SHIR	בדודוודב	SHEET	(Rule 26)				

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FIGURE 16 (10)

FIGURE 16 (11)

ATTAATAAAT TTTTTTAC ACACACACAC ACACACACA	ACACACACAC ACACACCCTA TGTATCCTTC TGTTTTTCTG CAGAACCATA TTTAATACAC	GACGATTACC TATCGATTCT GTATTCTGCC AAAACTGAAA ACAGTTCATT	TITCCATCTC TICTCAGAGA GGCTTGTCAG CCATTAGTTC TCTGATGGGC TCAAGAAGTT	TITITICICA CIGITAGGAT GGAATIGATA TICIGITGAA ACTITCTATA	AACTTGTTTT GAGGTTATTT TCTCTACTTA CTTTTGCTGG AAATGGAACA	CTCTGTATCT AGTTAAGACA CATAAACTGA CTTGTGATAC CATAATGTTG TGTTGAATTT	GAAAATCATC TGTCAAGGTG TTAACTAATG GCAAAGCATT TAATAAATCA	ATTCAGGTGC TCTGAATTAT CTGACTTTTA AATTCTTACT TTATAAATGA	GCATGGAAAA GTTAACTCTC CTAACCCCGA ATTATTACAT TATTAAGGAC
	ACACACCCTA TGTAT		TTCTCAGAGA GGCTT	TTTTTTCTCA CTGTT		AGTTAAGACA CATAA	GAAAATCATC TGTCA		GCATGGAAAA GTTAA
CTCCTATCTA ATTAATAAAT	ACACACACAC	CTGCTTTTAT GACGATTACC	TTTCCATCTC	ATGCAGTTTT	CCTAAGTGGA AACTTGTTTT	CTCTGTATCT	TATATTCTTA	GCATTCATGT ATTCAGGTGC	GAAAATTGGG

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FIGURE 16 (12)

FIGURE 16 (13)

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AGTTAGAACT	ATCACCAGAT	ТТТАТТАСАТ	ATGGTTTTTC	TAGTTGGTAC	GTGAGTCCCC	CTCCAAGTGC	TGAGTATTTG	CAGCTATTAA	AGTGGGATTA	ATAGTGTTTA
AGTGACATGT GCCAAAAACT GAATAGGTAG AAATGAGATG CAGAGAGCCC AGTTAGAACT	AAGTCTGGTG CAGTAATGCA GGATTGAGGC AATAAACACC AAACTACAGT ATCACCAGAT	AATGGATGTT TGAACGGACG GTTTAAAGGA AAATTGATGG TATTTGGTAA TTTATTAGAT	AATCCAGGGC CATGGAATGA GAGGGGAAAA TGACTAACCA TAGTCATCAA ATGGTTTTTC	TTAATGAATC TGAATTTTGG TGTAAGAGCA ACATTTTCTT AGGCCTTGCC TAGTTGGTAC	TTTAGCAGCT	CACCAGCCAA ACAATGAGCC TCTTGAAAAG GACGATGCCT TTTCACTTCT CTCCAAGTGC	TTATAGTTAG GGGTTCCCAG TGAGTATTTG	AAATATTAAG TCATGCCCGT GGTTGACAGC ATGGCCCTAC TGCTCATCAT CAGCTATTAA	CCTTAGGCAA GTTAATGAAC TTTTCTAAGC CCCAGTCTAC TCATTTATAA AGTGGGATTA	CTACTTCATA AAATTATGAA GCCTGAGTTA GGTCATTCAG ATAGTGTTTA
AAATGAGATG	AATAAACACC	AAATTGATGG	TGACTAACCA	ACATTTTCTT	TTGTTCCTCT	GACGATGCCT	TTATAGTTAG	ATGGCCCTAC	CCCAGTCTAC	GCCTGAGTTA
GAATAGGTAG	GGATTGAGGC	GTTTAAAGGA	GAGGGGAAAA	TGTAAGAGCA	GCTACCATGC	TCTTGAAAAG	TGAAGTTACT	GGTTGACAGC	TTTTCTAAGC	AAATTATGAA
GCCAAAAACT	CAGTAATGCA	TGAACGGACG	CATGGAATGA	TGAATTTTGG	AGCTGACTAT GATAATGACT GCTACCATGC	ACAATGAGCC	TTGGCAAATA GGAGGCCTTT	TCATGCCCGT	GTTAATGAAC	CTACTTCATA
AGTGACATGT	AAGTCTGGTG	AATGGATGTT	AATCCAGGGC	TTAATGAATC	AGCTGACTAT	CACCAGCCAA	TTGGCAAATA	AAATATTAAG	CCTTAGGCAA	TTAATAATGT

FIGURE 16 (14)

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GTCTGATTCT TCGAACCTAG TAAACAGTCA GTAAACAGAA GCAAATGCCA CATGCCTGAT TTATATCCAA GGGGAGAAAG GTAAAAGTGA AATTTTCATG ATTTATGGAT TCAAATTATA	G TAAACAGTCA G GTAAAAGTGA	TAAACAGTCA GTAAACAGAA GCAAATGCCA CATGCCTGAT GTAAAAGTGA AATTTTCATG ATTTATGGAT TCAAATTATA	GCAAATGCCA	CATGCCTGAT TCAAATTATA
CATTTCAAAG ATGCTTTATA	A AGCTATTGTT	TTGGTAAGAA	TTGGTAAGAA GAATTGAGCT GAAACAGAAT	GAAACAGAA!
TTTCTGACAG CAGTGATTAT GATGTTCACC TTTTGCATAT			TGATGTCTTT AGAGGATATA AGTAGATATG TCTGTCTACA	AGAGGATATA TCTGTCTACA
GAGCGTGAG	CAGAGAGA GAGCGTGAGA GCATTAAAGT	TAGTAAACAT CCCCCTCGCT	CCCCCTCGCT	TTTTTTT
TCTTACTCT	TGAGACAGGG TCTTACTCTG TTGCCTAGGC TGGAGTGCAG TGGTGCAATC	TGGAGTGCAG	TGGTGCAATC	GTGGCTCACT
CATCCTGGG	GCAGTCTCAA CATCCTGGGC TCAAGCGATC	CTCTCGCTCA GCCTCCTGAG TAGCTGAGGT	GCCTCCTGAG	TAGCTGAGGT
ACACCCGGC	GTGCACCACC ACACCCGGCT AATTTTTAAA TTTTTTATT		GTAAAGGTGA GGTTTCACCA	GGTTTCACCA
FTCTCAAAC	TGTTGCCCAG GTCTCAAACT CCTGAGCTCA AGCAATCTGC TCACTTCAGC CTCCAAAAT	AGCAATCTGC	TCACTTCAGC	CTCCAAAAT
CAGGCGTGA	GCTGGGATTA CAGGCGTGAG CCACCACGCC TGGCCAGTAA ACCCCATTCA TTTACATCAT	TGGCCAGTAA	ACCCCATTCA	TTTACATCAT

FIGURE 16 (15)

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TGTTATTTAG	GCAGCTGGAG	CTGGAGAAAA	TGCCTAAAGA	ACAGAAAATA	ATTTGGGTGA	TATAGAAACT	GATTGATTTA	AAAGAGACCA	AATTATTAA	AGTATCTAGA
CCTGCAAAGT AGGTAGGTTC TGTCTTTATT TGTTATTTAG	TTGAGGAATA GGTGTTTTGC CAAGAGTCAC GCAGCTGGAG	CTGATTCCAC CAACGCTGTT TACATCACAT CTGGAGAAAA	TTAGTGGGAG GGATGAGACA CAGGCTGCAA TGCCTAAAGA	TAATCGGGAA TAAAAGCAGA AAACAAGACG TTTGTTTCTG TTAAAATGAG ACAGAAAATA	GAGCGATTTG	GACTGCTCCT GGAATGCTGC ATCTGGTTCT GGACTACTCA TTACTAGGCT TATAGAAACT	GGGCTGACGG	TAAGAAATAT TAAAAGAATT AAATGTGTAT AGCTCAGCTA AGCAAAGATG AAAGAGCCA	TACAAATATC TGAAACGTGC AAACTTTAAA AAGAGAGATT AATTATTTAA	CATGATACAC GGGGGCACAA TATGCAGTCA CAGGATGAAA ATTTCAGCTG AGTATCTAGA
AGGTAGGTTC	GGTGTTTTGC	CAACGCTGTT	GGATGAGACA	TTTGTTTCTG	TGTTTGGGAT TGAGCACTTG GAGAAGTGGG GAGCGATTTG	GGACTACTCA	AGCTGGAGGA GGTTCAAAGA AAAGCTCCAA AATGATTAGC GGGCTGACGG	AGCTCAGCTA	AAACTTTAAA	CAGGATGAAA
CCTGCAAAGT	TTGAGGAATA	CTGATTCCAC	TTAGTGGGAG	AAACAAGACG	TGAGCACTTG	ATCTGGTTCT	AAAGCTCCAA	AAATGTGTAT	TGAAACGTGC	TATGCAGTCA
CTTACTTGTC CCTCCAAAAT	GTGAAGAACT TGAAGTGGTG	TGGCAGAGCT GTATACTCTT	GTGCTCTGAG GCACAGATGT	TAAAAGCAGA		GGAATGCTGC	GGTTCAAAGA	TAAAAGAATT	TACAAATATC	GGGGCACAA
CTTACTTGTC	GTGAAGAACT	TGGCAGAGCT	GTGCTCTGAG	TAATCGGGAA	AGGCGTTTGT	GACTGCTCCT	AGCTGGAGGA	TAAGAAATAT	GCTAAATGTA	CATGATACAC

FIGURE 16 (16)

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¥.	GAATTCCCC	AGAATTCCCC GATAGTGAAT CTGTTAAGGC	CTGTTAAGGC	TGTCTGTAGT	GTGGCCTTTC	CCTGGAGAGG
Ü	AATAGAAAT	TTCAAGTCTT	CAATAGAAAT TTCAAGTCTT ACGATTTTAA AAGTTTCTTG GGAACTAGGT ATTAGATGAT	AAGTTTCTTG	GGAACTAGGT	ATTAGATGAT
<u>.</u>	TTAGAGAAT	GTTAGAGAAT TATTATTAAT	TTGGTCAGGT	ATGATAATGG	TATTGTAGTT	CTATAAGAAA
A	ATTGTATTT	TTTAGAGTTA	AATTGTATTT TTTAGAGTTA CATACCCTGA AATATAAGCA TAGAATATGA TGTAGGAGAT	AATATAAGCA	TAGAATATGA	TGTAGGAGAT
<u>-</u>	TGCTTTAAA	TTGCTTTAAA ATACCACAGT	AAGGAAAGAA AGGAAGG AAGAAAAGAA AGGAAGGGGA	AGGAAGGAGG	AAGAAAAGAA	AGGAAGGGGA
Ă	GAAAGGGAA	AAAGAGGCAA	AGAAAGGGAA AAAGAGGCAA AGAAGGAAGA GAAGGTAAGA GAAAGAAAA GAATGAAGGA	GAAGGTAAGA	GAAAGAAAAA	GAATGAAGGA
¥	SAAGGCTGG	AGAAGGCTGG GCACTGTGGC	TCATGCCTAT	TCATGCCTAT AATCCCAGCA TTTAGGAGGC CAAGTTGGGA	TTTAGGAGGC	CAAGTTGGGA
Ŭ	SATCACTTA	ATTAAGCCCA	GGATCACTTA ATTAAGCCCA GGAGTTCAAG GCTGCAGTGA GCTGTGATTG CGCCACTGCA	GCTGCAGTGA	GCTGTGATTG	CGCCACTGCA
ິນ	rccagcctg	CTCCAGCCTG GGTGGCAGAG	TGAAGCCCTG	TCTCTAAAAA AAAAAATAA GTTAAAAAGA	ААААААТАА	GTTAAAAAGA
A.	AGAAAAGGA	TAGATGAAGT	AAGAAAAGGA TAGATGAAGT ATGGCAAGAT GTTGGTAATG	GTTGGTAATG	TTGAACCTGA AGGAAGTTAA	AGGAAGTTAA
T/Z	TATGTGAGTT	CACTTTCCTC	TTCAGTCTTC TTTATGTATG	TTTATGTATG	TTTGCCAACT	TTCATAATAA

FIGURE 16 (17)

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CCTATTTTTA GTAGAGATGA GGTTTCACCG TGTTGGCCAG GCTGGTCTCA AACTCCTGGC	CCTATTTTTA GT
CCCGAGTAG CTGGGATTAC AGGTGCCCAC CACCACGCCC AGCTAATTTT	TGCCTCAGCC TCCCGAGTAG
GAGTGCAATG GCACGATCTC CGCTCACTGA ACTCTGCCTC CCGGGTTCAA GCGACTCTCC	GAGTGCAATG GC
TTTCTTTTT TTTTTTGGG AGACAGAGTC TTGGTCTGTC CCCCAGGCTG	TTCTTTTTCT TT
GCTCCACTTG TAGACATTGA GTGGAGCTCT AAGTGTCTTC AGAATAGCAA AACACTAGTT	GCTCCACTTG TA
TTTCTGTCCC TCATTCGTGG AAAATTGAGT GGAGCTCAAT TTTGAGTGGA GCTCTAAGTA	TTTCTGTCCC TC
TCTACTAAGG TGAAAAAGCA GAGGGCAGAG GTCGTGATTA GCAGCTGACC GCCCCCTGCT	TCTACTAAGG TG
GGAAACTTG TTAGAACTGC AGACCTATCA GGGTACCTGC AGGAGGTGAG	ATAGAAATCC AGGAAACTTG
TIGCICIGG TAATGIGGIC IGGGCIGAAG GGCCCTITCI AAGGIIGIAG	GGTTCACCAT CTTGCTCTGG
TGACTAGAAC AGCCTCATTA CCACATGGGC AGAGTTCTGG CCGACCAGGG ACCACGTAGT	TGACTAGAAC AG
TATATITIC CIGAICAAAA CITAGIAGCA GIAITAAICC CIGGGCIICC	ACAATTTAAA TTATATTTTC

CTCAAGTGAT CCGCCTGCCT TGGCCTCCCA AAGTCCTGGG ATTACAGGTG TGAGCCACCA	ATTACAGGTG TGAGCCA	CA
CACCCAGCTG CAAAACCCTA TTTTTCTTGA ATGGAGAAAC ACTTTCCCCCT TATTTATTGA	астттсссст татттат	GA
GTTTGGGAAG CAAGAAGAGG GGTAATTCAT TAAGTGAAAA TTTCCAAAAT	TTTCCAAAAT CCAGAAAACA	CA
TCGATAAAGC AGCAGCTTAA TTTTTTAAG GAAGAATTTT T	TTAAACTATC TTCTTTGAG	AG
CCTCTTTAGG AAGACCTCAC GTCCTTGCCT TGAATGTTGA GA	TGAATGTTGA GAGTGGGAAA TCCAGGGAGG	GG
TTTTGGAATG CATGCCTTAT GTCTGCTTTT TTGTTTA GA	TTGTTTGTTA GAGAAATATA AATATTTTAT	AT
CTAGGTTTTG CTGATGGCAG TCAAGCATGA ACACAACCCA CTGTTTGAGA AGCTGTAATT	CTGTTTGAGA AGCTGTA	TT
TCTGAATTTC TGCAGAGTGC ACATCTAGGC CAGCAAATGG CAGTAAGAGT GAGGTGGATT	CAGTAAGAGT GAGGTGG	TT
TAGCTCAGTG TAAGGATGAA CTCCAGAACC ATCGGCTCTG ACTGAAAGTG AAGCGGCAGC	ACTGAAAGTG AAGCGGC	D _G
CGCGTTGTGG GAAAGCTGGC TGGAGTCTCT CTCATAAGCA GGCATTCTTT	GGCATTCTTT TTCTCCAGCC	ÿ
CGTCACTGTG TTGGTTTTGGG CCCACGGTAA GCCTCCTGGC CTCTAGGCTG TAACCCCCAC	CTCTAGGCTG TAACCCC	AC

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CATCCTCCTC TGCCTCGCCT CCAGAGTGAT TGTTCTGAAG CACAACTGGA TGTCATTCCC	TGCCCCACAT ACCTCACACG	CCACTCTTCT	ATTTATTTAT	GAGACAGAGT CTTACTGTAT CACCCAGGCT GGAGTTTAGT GGCACCATCT CAGCTCACTG	CTCCCAGACT CAAGCAATCC TCCCACCTCA GCCTCCCGAG GAGCTGGGAC	TGCCACTATG CCCGGTTAAT TTATTGTAAT TTTTGTAGAG ATGGGGTTTC	CTTGAACTCC TGGACTCAGG CGATTCGCCC GTCTCAGTCT	TGGGATTATA GGCGTGAGCC ACCATGCCCA GCCGCTAGCA CTCATCTTAA	CTTTCCCACC AGACTGCGGG CTCTTCAAGA GTAAATGCCA	CAGTTTGTGG CACATTCTAG GCACTCGCCA TCATGAAATA
CACAACTGGA	TGCCCCACAT	TCAGTGCCTC	TTATTTTTT	GGCACCATCT	GCCTCCCGAG	TTTTGTAGAG	CGATTCGCCC	GCCGCTAGCA	CTCTTCAAGA	GCACTCGCCA
TGTTCTGAAG	TACAGGGACT CCATCCCTTG	TATTGTAAAC	ATTTATTAT	GGAGTTTAGT	TCCCACCTCA	TTATTGTAAT	TGGACTCAGG	ACCATGCCCA	AGACTGCGGG	CACATTCTAG
CCAGAGTGAT	TACAGGGACT	TTGATTGAAT	TTGTACATTT	CACCCAGGCT	CAAGCAATCC	CCCGGTTAAT	CTTGAACTCC	GGCGTGAGCC		CAGTTTGTGG
TGCCTCGCCT	CTTCCTGAAC TCCTAGCACC	TAGACATTCC TAATGAAGAT TTGATTGAAT TATTGTAAAC TCAGTGCCTC	AGTTGCCTCT CTGCCTGCCT	CTTACTGTAT	CTCCCAGACT	TGCCACTATG	CCAGGCTAGT	TGGGATTATA	ACTTATCTGG	TTTATTTCCC
CATCCTCCTC	CTTCCTGAAC	TAGACATTCC	AGTTGCCTCT	GAGACAGAGT	CAACCTCTAC	CATAGGCACG	ATCGTGTTGC	CCCAAAGTGC	TCGTATATTT	TGTTTTCACC
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FIGURE 16 (19)

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TACAAACGTG AAAAGATGAC GAGCACTCAG CAACTTTCAG	C TGGGCTGCTT	GTTCAAGGAG AGCATAGTCT ACAGAACCAG AGACCTGGCT ACTCTGGAAG	TTAGACTTAA GCCCACCCCG GTCCTTGAAT GGGGAAATAT TTCCCTTCAT TCCTGTGTTT	T CCACTACCCG	TCAACTTAAC AATCCATGAA AGAAACAAGA TGGTATATAA CTTTTTCTAA	CTTTGTTTAT TTGTTTCCGG TTAAAAGAGG AGGTGGCATT GAATTGTTTG	AATAAGAAGC ATCTTAATAT AACTAGACTG GACATCTGTC	CCATTITCAA AAATTACAAG TTTCGATCAT TGCTAAATTG TACAGATCCC AATCTGTCTG	C TAATGCAATC	ATGAAGTATT AGATTGCTTC TCCCTATTGG TTCATGCATT GCTAAAGGCT
GAGCACTCA	TGCCCTGAT	AGACCTGGC	TTCCCTTCA	AATGTTTAT	TGGTATATA	AGGTGGCAT	AACTAGACT	TACAGATCC	GCAGTCTTT	TTCATGCAT
AAAAGATGAC	ATTTATTGAC	ACAGAACCAG	GGGGAAATAT	ACATGCTGGA	AGAAACAAGA	TTAAAAGAGG	ATCTTAATAT	TGCTAAATTG	ATAAAAGCAG AAGCAGACTA GCAGTCTTTC	TCCCTATTGG
TACAAACGTG	TTCAGCATGT	AGCATAGTCT	GTCCTTGAAT	ATGCAGTGAT	AATCCATGAA	TTGTTTCCGG	AATAAGAAGC	TTTCGATCAT	ATAAAAGCAG	AGATTGCTTC
AACCTCTGGA GCTGTGATAT	TGAGTAAACA AAGGCTTTCA TTCAGCATGT ATTTATTGAC TGCCCTGATC	GTTCAAGGAG	GCCCACCCCG	TAGGGACAGA AAGATGAGTA ATGCAGTGAT ACATGCTGGA AATGTTTATT	TCAACTTAAC	CTTTGTTTAT	TTTCTTCTTC	AAATTACAAG	CTCTGCATAC ATTTGCATTT	ATGAAGTATT
AACCTCTGGA	TGAGTAAACA	CCTGTCTGTG	TTAGACTTAA	TAGGGACAGA	AAGCTGCCTC	TTTGTGATGC	TTTGGTTTGG	CCATTTTCAA	CTCTGCATAC	CCCCAAATGC
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FIGURE 16 (20)

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	FIGURE 16 (21)					
	TAAAAGGATC	TAAAAGGATC ATTGATTTTA		ATTATTTAAT GTGTACAGCA GGCTGAGCTT		CCTTTCTTTT
	TTAAGGGAAG	TTAAGGGAAG AACCTTCAGG	GGCATTGCTT	TAGTTTTTA	ATGTTAAATC	TCATTTTTCT
	TTGAAAATAA	GAAGTTAAAG	TTGAAAATAA GAAGTTAAAG CTGTATTCAC ACAAGCTCTC AAAGTGCCAG ATTTTCATTG	ACAAGCTCTC	AAAGTGCCAG	ATTTTCATTG
CI TO	TGTTTTAAA	CCATCTAGGA	TGTTTTTAAA CCATCTAGGA AATGTTTGAT TCTAATGAAA CATTACTGCT GAAAATTGGG	TCTAATGAAA	CATTACTGCT	GAAAATTGGG
Carrent Pari	CTGAAATTGC TGGG	TGGGCTGAAA	ATATTGTTAT	AACTTCACAT	GATTCCAGTG	TTGTATTATT
e curer	ATTTTTTT	TTCCTTTTTT	TGACCCGATA	TAGATGAAGC GAAGAGACAA GGGAGCAATC	GAAGAGACAA	GGGAGCAATC
(Dula 36)	CCATGTGTAA	TAAAAAAGG	CCATGTGAA TAAAAAAGG CAGCCTGAAT TGTTGTTGCT	TGTTGTTGCT	GTTTTTGAAA TTTAAGCTGG	TTTAAGCTGG
	TTTTCAATTA	TTTTCAATTA AATTCAGTAA	ATGGTCCAGG ACTATAAATG		TTGAACATTT	TTTACCGTGT
	GATTTAAAAT	ТТАСТТТТАА	TGTTTTTTT	TTGGGTTTTT	TTTTTTGA	TGGTTTACAT
	TTTCCCCATG	GAAAGCAGCT	TTTCCCCATG GAAAGCAGCT ATGTCATGTC GGCATGATTC ATCATGGTAA CATCTCGGGT	GGCATGATTC	ATCATGGTAA	CATCTCGGGT
	TATTTTGGTT	TGTGTTATGT	TATTTTGGTT TGTGTTATGT TCAGAAAGCG GAATGCCAAA AATAAAGAGT GGTTTGTGAT	GAATGCCAAA	AATAAAGAGT	GGTTTGTGAT

FIGURE 16 (22)

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GTCTAGTGTG	TCTTCCTTTA	GTCTAGTGTG TCTTCCTTTA ACAAATCAAA GGCTTTTATT		TAATCCACTT	AATGGGACAC
TGCAGAAATT TAAAAAATGG AAGTCCCATC CACAGAAGGC AGGTACTATG ATGTAAAAAG	TAAAAAATGG	AAGTCCCATC	CACAGAAGGC	AGGTACTATG	ATGTAAAAAG
TTTAGGTGGG GGATTAATAG AGTGATCATA	GGATTAATAG	AGTGATCATA	ТААТТТАТGA	TAATTTATGA GCTAAACCGG AGGCACTTTT	AGGCACTTTT
TTTTTGAGA	TCGAGTCTCA	TTTTTTGAGA TCGAGTCTCA CTGTTGCCTA GGCTGGAGTG CAGTGACGTG ATCACAGCTC	GGCTGGAGTG	CAGTGACGTG	ATCACAGCTC
ACTGCAACCT CCGCCTCCCG GGTTCAAGCG	CCGCCTCCCG		ATTCTCATGC	CTCAGCCTCC	TGAGTAGCTG
GGACTATAGG CGCCCACCAC CATGCCCAGC TAATTTTGT	CGCCCACCAC	CATGCCCAGC		GTTTTTTGTA GAGATGGGGT	GAGATGGGGT
TTCACCATGT	TGGCCAGGCT	TGTCTCAAAC	TGTCTCAAAC TCCTGACCTC AGGTGATCCG	AGGTGATCCG	CCCACCTCGA
CCTCCTAAAC TGCTGGGATT ACAGGCGTAA GCCACCATGC CTGGCCCAGA GACACTTTTG	TGCTGGGATT	ACAGGCGTAA	GCCACCATGC	CTGGCCCAGA	GACACTTTTG
AGAGTGAAGA GGAAGCTGAG	GGAAGCTGAG	AATAATTCAC TGATCTACAA CTGGGACCAT	TGATCTACAA	CTGGGACCAT	CCAGGGCAAG
CCAGATGCCA TTACCACTAG CTAGAAAGCT TGCCAAGGTC TCATTTACCT TGGTATATAG	TTACCACTAG	CTAGAAAGCT	TGCCAAGGTC	TCATTTACCT	TGGTATATAG
CAAATTCTTC	TTTGAATTCT	TTTGAATTCT GGAAATTCTG GTAAGTCATT GAGGTAGCTC TGTGCCAAGG	GTAAGTCATT	GAGGTAGCTC	TGTGCCAAGG

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TTTGTAGCAG CATAAACGTC CATAATAAAT GTAAGTTTTC GTGCTGCTTG CAAGAACTCA ATTCAATTCA GATGCTCCTG AGACACAAAG GGTTGCCTGT CCTTCTGAAT TAGGAGAGA AAGAGAAA ACACTAATAC ACATAGGTAG GTGCCATTAA AAGGGTGCAT ACATTAAAGC CAGGTGGTAG AGCAATATGG TAGAATTCTA ATATTTCAGG CAGTACAACA CTTTCCTGCA AGTCTATGAA TCCAGTAATT TGCAGCTTCT CAAATCTGTG AGAATCGTAT CGACAAAGGG GTTATCAGCT AAAGATCTTT CTGGGATTCA TATTTTCACT TCGTGGAAAG AAATATTAGT CAAGGATATC CTTTTTCCTG AAGGCCTCTT TGAGGTCTTT GGTATACAGA CGCTGTGCAA CACTGGGACT CTCTATAATA GATGTAGCTG ATGGTAAATT GGCACAGAAA GCAGCTGTCC **AAGACAAAAC** GCCCCTGCCT TCAGGCACCT TTTGTAGGAG CTGGAATCAG GTCAGGGCAG GCCACAAGAT TAAAAATAGC GGGGGTCTAA TAATGCACCT GTAAAGGGAG GGCTTTAATT AATGTTATAT TAATACACCT AAACTTATCA CTACACTTTC GCAACAATTA AGGAGGTCAA

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FIGURE 16 (23)

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GTGCAAGAAG ATTTGTAACG TGAGAATTTT CTGCATGTTT GAAATATCTT ATAATTTTA GTATATATGT ATGTACATAT ATAGACATAA ATATGTATAT ATAGACATAA ATATGTATAT ATGTGTATAT GTATATATGT GTATATAGAC ATATATGTGT ATATAGACAT AAATATGTAT ATAGTGTAT ATAGACATAA AGACATAAAT GTACATATAC ACACATATAT ACATACATAA ATAAATATGT ATAAATATGT ATATATGTGT ATGTGTATAT GTATATAGAC GTGTGTATAT ATTTATGTAT ATATGTATAT GTATATATGT ATATGTGTAT GTATATAGAC ACATAAATAT ATGTATATAT ATATGTGTAT AGACATAAAT ATGTATATAT GTGTATATAG AAATATGTAT ATATATATGT ATATACATAA ACATAAATAT GTATATATGT AGACATAAAT AATAATGTGT ATATATGTGT ATATAGACAT ATATAGACAT AAATATGTAT TGGGAGATAC ATACATAAAT GTGTATATAT GTGTGTATAT GTGTGTATAT ACATAAATAT ACACACATAT AAAATTAAAA ATGTATATAT GTGTATATAG ATAAATATGT ATATGTATAT ATGTATATAT

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FIGURE 16 (24)

FIGURE 16 (25)

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CTAAAAACTG TCTCATAAAG	AACACACATT CTTTTGGGTC	TTGCCCTTAA CAGTCTTTGA TGTGAAATTT ACTGTTTCTG	TCTTAACCTT GCCTGTCTCG CGTACATGGA GTTTTGGCTC CTGGCTCCTA GTCTGCATCT	TATGTGACCA CTGCTCATCT TTTCTGCTGT	CACAACTCCA GTCCAAGCCA CAAACCTCTC TCTCCTGGAC TCCTGCGGGG AGTTCCTTTC	TAAGTGAGAC TGCGGAAGAG	CCAGAG GAAATGAAGA CTCTGCTTGT GCACATGCTG GGTTTGACGG	GTGCTGGATA TCCGATGGAT GGCCCTTAAG GTGAGCTCAA GGCTTAAGGG AGAGATAGGG	GCTGATGATC TGAGATTCAT CAGTGTGTGG CTGATGTTTA AACCCAGGGG ACAGGATAAG	
CCCATCTTCC	TAAGTAGCAA	CAGTCTTTGA	GTTTTGGCTC	TATGTGACCA	TCTCCTGGAC	CTGGCAGAGG	CTCTGCTTGT	GTGAGCTCAA	CTGATGTTTA	
CACTTTGTAA CCCATCTTCC	TATGCAATGG	TTGCCCTTAA	CGTACATGGA	AGAATCTGGT	CAAACCTCTC	CTCCGCACAA CTGGCAGAGG	GAAATGAAGA	GGCCCTTAAG	CAGTGTGTGG	
TTATACCATT	TCCCTGTACC TATGCAATGG TAAGTAGCAA AACACATT	CCCATAACAT TCCCTGTAGT	GCCTGTCTCG	CCTTGCCCAA AGAATCTGGT	GTCCAAGCCA		AAGTCCAGAG	TCCGATGGAT	TGAGATTCAT	
ACATTCTGCA	AGTCTTCTTT	CCCATAACAT	TCTTAACCTT	TCACCCCATC	CACAACTCCA	TCTCCCTGCA TGAGTCTATT	GCAAGTTTGC AAGT	GTGCTGGATA	GCTGATGATC	
			SUB	STITUTI	E SHEET	(Rule 26))			

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TGGGACTCAC GCCAGTGCTG CTGAAGGAAG TAGCAGGACC GGTAATCGTT GGACCTGGAG AACTTGAATT TGAATTTTAA GGTTGGTAAC AGAGACCC ATGACAGCAG AGACAGTGAG TTACTGAACA GTTACTGCAT CACGGCAACC CTATAGAGTA GGTGTCATCA CAGCTAGATT AAGCAGTTTG CCTCAGGTTA TTAACGTAGA GCTAGGATTT GAACCCGGAT GGGCTGATCC CAGAGCTCAT GCTAGACTGG TGCTCACAGA AGACTGGGAC CGAAAAAAAT TAATAAAAA AATAAGGAGC CCCCTGGGCT AGCAAATTAG GAGTTGTTCA GACAGATGTG AAAAGGAAAG TCAAAATCGG ACCTCTGAGG CAGGAGGAAA GCCCAGAAAG AGTAGATTCC GCAAGATTTG TAAAAAATAC GAAATTATTT GGGATAAAGA CTTTCAAAAA GTGGGGGCTG GATACCTTTT GTGTTATTCC AGGCAAAGGG ACCAGAAAAG GTTTAATTCT ACAGATGAGG ATATGAGGTG TGTACAGAAG AGCAATTTTA GTAACACCCT CAAGGCAGAG GGAAAGTCAC CTTAAAAAAG CACCAACTGG GGAACAGAAG GCCTGGCACT TCCCCATCTT GCTTTAAATC

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FIGURE 16 (26)

FIGURE 16 (27)

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AGAGATAAGA	CACCTAATGA	ATATAGTAAT	TGAATCTGGC	ATACCTAAAT CACTTAGTAC TGAATCTGGC ATATAGTAAT CACCTAATGA AGAGATAAGA	ATACCTAAAT
AGTTATCAAT	TGGTAATCCA	TCAATGTTAT	CTTCACACTC	CCTTTTGATG AACACAAATG CTTCACACTC TCAATGTTAT TGGTAATCCA AGTTATCAAT	CCTTTTGATG
AACTCACATC	CCTTCTGAGA	GTCTCTTAGG	AGAGAGCCAG	GAAAGAAAGA AAATACCTCC AGAGAGCCAG GTCTCTTAGG CCTTCTGAGA AACTCACATC	GAAAGAAAGA
GAAAGAAAA	GGAAGAAAA	AAGAAAGAAA	AAAAAGAAAG	AGAAAGAAAA GGAAAGAAAG AAAAAGAAAG AAGAAAGAAA GGAAAGAAAA GAAAGAAAA	AGAAAGAAAA
AAGGAAGGAA	GAAGAGAAGG	AGGAAGGAAG	AAGGAAAGAA	AGACAAAGAA AGAAAGAG AAGGAAAGAA AGGAAGGAA	AGACAAAGAA
AAGAAGAAAG	AAGAAAAGGA	AAAAAGAAAA	CAAACAAACA	GAGCAAGACT TTTCTTAAAA CAAACAAACA AAAAAGAAAA AAGAAAAGGA AAGAAAAG	GAGCAAGACT
CTGGGCGACA		TTGCGCCACT	TAAGCCAAGA	CCGGGAAGTG GAGGTTGTAG TAAGCCAAGA TTGCGCCACT GCATGCCAGC	CCGGGAAGTG
TAGCCTGGAT	GTCAGGAGAA	AGTTGGCTGA	CCAGCTGTTC	GGTGACAGGC ACCTGTAATC CCAGCTGTTC AGTTGGCTGA GTCAGGAGAA TAGCCTGGAT	GGTGACAGGC
AGCCGAGCAT	TACAAAAATT	CTACTAAAAA	AATCCCGTCT	ACCAGCCTGG CCAATGGCGA AATCCCGTCT CTACTAAAAA TACAAAAATT AGCCGAGCAT	ACCAGCCTGG
GGAGTTTGAG	CCTGAGGTCA	GGGCAGATCA	AGGCCGAGGT	TGTAATCCCA GCACTTTGGG AGGCCGAGGT GGGCAGATCA CCTGAGGTCA GGAGTTTGAG	TGTAATCCCA
GGCTCACGCC	CAGAGAGGCA	AAAATACCTC	CTAGCCCCTG	CTGGTAAAGT GGCTGGCGAT CTAGCCCCTG AAAATACCTC CAGAGAGGCA GGCTCACGCC	CTGGTAAAGT

FIGURE 16 (28)

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AAAATGTGAT	TGGCACAGAA	GGTATAAAAC	CATCTATGAA ATTAGGGCAA GGTATAAAAC TGGCACAGAA AAAATGTGAT		CATGTGATTT	
CAGTTTTACA	TTTCTGGACT TCAGAGCTAA ATTGCAAAGT CAGTTTTACA	TCAGAGCTAA	TTTCTGGACT	ACGGTGCTCC CTGGGTAGCC	ACGGTGCTCC	
AAAAAAAGGC	GAATAAGTAT	ATATATCAGG	AGGTGATTTA	GCTTTTTCCT CCAGCTTTCT AGGTGATTTA ATATATCAGG GAATAAGTAT AAAAAAAGGC	GCTTTTTCCT	
AGGCAGGAGA	CTTCAGATGG CACCCTCCTT GCACTTGCTC AGGCAGGAGA	CACCCTCCTT	CTTCAGATGG	CTTTACAATG TTGGACTATC	CTTTACAATG	
TTGCACTCAG	GGTCTTCCAC	ATTACTCCTA	TGTTATTCTT	AAAAATAGAA AGATGATAAT TGTTATTCTT ATTACTCCTA GGTCTTCCAC TTGCACTCAG	AAAAATAGAA	
ATCTGAGGTT	TAAATTAATC AACTCACTGC ATCTGAGGTT	TAAATTAATC	CTGAGGAGTG	CAATAAAAT GTGCCATGAA CTGAGGAGTG	CAATAAAAAT	
GAAGGAGTAA	GTAGGAATCA	CATGAAACGA	TAAACAAATA	CCGTAAGCTG TAATGGAACC TAAACAAATA CATGAAACGA GTAGGAATCA GAAGGAGTAA	CCGTAAGCTG	
GGGGGTAAGT	TGGCTGGAGT GGGGGTAAGT	TATGGGGTGG	ACGGTTACCC	TGTATATTAA ACATACTCGA ACGGTTACCC	TGTATATTAA	
AATAGATACA	AACACATACA	AATTTGTAAG	ATGCTTACAC	ATTATGTAAA TTGATAATAT ATGCTTACAC AATTTGTAAG AACACATACA AATAGATACA	ATTATGTAAA	
ACACGGTACC	TGAGTGAAAA AGGAAAGGGA AAGATACATA ACACGGTACC	AGGAAAGGGA		TTGGATCTTA AAAACCGACC	TTGGATCTTA	
GGCAACAAAG	ATATACACAT	AATAGACTCA	AATTAGAATC	GTCATGGAGT ATTCTGAAGC AATTAGAATC AATAGACTCA ATATACACAT GGCAACAAAG	GTCATGGAGT	

FIGURE 16 (29)

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GATTCAACAG	CCAATTCCAA ATCCCTGAAC TGAGTGAGAG AAATCAGAAT TATAATAGGG GATTCAACAG	AAATCAGAAT	TGAGTGAGAG	ATCCCTGAAC	CCAATTCCAA
AATTGGCTGC	TTCCTGACAC TACTGCATAT GCAGGAGTGT CACTACCAAG GTAAACACAG AATTGGCTGC	CACTACCAAG	GCAGGAGTGT	TACTGCATAT	TTCCTGACAC
CAATACTCAC	CTGCTTGTAA CAATACTCAC	ACCAGATGTT	ATGTTCCTCC	TCTATTACAG GATTGATAAT ATGTTCCTCC ACCAGATGTT	TCTATTACAG
GGTTCTTTTA	CTCAGTTCTC TCAGGAAAGC CAAAAATGA ATTTGAGGGT TTAGGATTGT GGTTCTTTTA	ATTTGAGGGT	CAAAAAATGA	TCAGGAAAGC	CTCAGTTCTC
ACCCACAATT	GAAAATGAGC CCAGCTTCAG TGAAGCTTGT TTCCTTCCCT CCTCAAGGTT ACCCACAATT	TTCCTTCCCT	TGAAGCTTGT	CCAGCTTCAG	GAAAATGAGC
ACTGACAGCT	GGCCGAGTCT GAGAGTTTCA GCGGAGACTG GTGCAGCCTT GTGTTTTTCC ACTGACAGCT	GTGCAGCCTT	GCGGAGACTG	GAGAGTTTCA	GGCCGAGTCT
AACAACTACT	AAGGAAGAAA TCGAAAATGT TTGGATTTCA AAGGTAACAA GAAGCTGGAA AACAACTACT	AAGGTAACAA	TTGGATTTCA	TCGAAAATGT	AAGGAAGAAA
GCACAGCAGA	CAAACTGTCT CACTTAGCTC CGTCTTGCTG GCACAGCAGA	CACTTAGCTC	CAAACTGTCT	CTTCCTGGTG	ATTGTGGCGC CTTC
ACAGTGCATA	CCCTGC ACATTCCCCA GCTGCGTGTC CGGTGGTGAC ACAGTGCATA	GCTGCGTGTC	ACATTCCCCA	CGCCCTGC	CTCGGCTGCA GGCG
ACTCTGGCCC	TCAAAAGCAC ACTCTGGCCC	GATCACGTCT	AACTGA AAGTGGCTAT	GATGAACTGA	TTTAAGGCAA GATG
TGTCCACTGA	CTATCC CTTACAAGCG GAGTGTCAGC TGCCTCTTTT TGTCCACTGA	GAGTGTCAGC	CTTACAAGCG	GTTACTATCC	TTATTATGGT GTTA

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TTTTCTCAGC AGCTGGCTAC GGATGTGCCA GTGGTCAGAT ACTTTGCTCA TCATACGCAG GTGCTGCTGC CTGGTACTCA AAGGAGCTAC AAGACATTGG GCATCCACTT CCACTCTTT GTTTGCTCAG GCTTCAGAAC AAGATCCACA CATATCTCAA TGACCACCTT TTCTCAGGTG GGATGGTAGA TGCTGGAATG GGTCACAGCA TTGCCCAACC AAACTTTGCA TAAATATGCA AAAGTTAATA GGCTCTTCAT TTTCCCTTTA AAAAATGTCA ACAATTGCAT CCTTGGTCTT TAAATACTGC GTCAAACAGC CCATAGTGCC TCTTGAGGTT GGCCTTTATG GTTTCTTTGG AAATTAGAGA TTTTCAATGG CCTCACCCAA CTGGATAAAA GAACAATTGC CTAAAGGGTT TCTAGCAACT GCTCACTGCT TCATTTCCTG GCCAAGGTTG CTGGGGACCC TGGCAGTCAC TTCAAACATG ATGGATATAG GATATGCTTG AAAAAGGCTG GAAGCTCTGA GCAGAATATG AACCCCGTGT TTCACAAACC TGGTAGAATA TTCTTCCCTC TTTTATGGAA CCAAGGCCCA AGCTTTGTGC TCAATTGGCT TTAGAATCAC GGAAAAACAA

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FIGURE 16 (30)

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TTATGATGCT GTGTATAGTA ACTCACAGAT CATGCTCCAT GAAAATGCTT CAGAACCCAA TTTGAAACAG GGTTCAAGCG ATTCTCCTGT CAGCTTCCCG AATAGCTGGG ATTACAGGCG TTAGTAGAGA CAGAGTTTCG CCATGTTGAC TTGAAATTGT GTCTCGGCTC ACTGCAACCT CAGGCTTGCC TTGAACTCCT GACTTCAGGT GATCCACCCA CCTCAGCCTC CCAAAGCACT TCTCTATCTC AGAATTTATC ATTTTGTTTC GTACACCTAA GTAAGGTTTT TTATTCCTAC AAAAATATGT CATTTCAGTG CAGATCCTGT TTTTATTTT TTTTTTAGCC ATGTGTGACA AAAGAGAGGC ATCTTTTAT AGTGGCTGTG CCTGTTTTCT TTTCTTTCAA ATTATTCATT TTTGGAAGTA GGTTCCTTTC GTTTTCTCAG GCTGGAGTAC TTTTGTATTT CCGTGCCCAG TCTTATTCAT AAAATTCCCT TCAGAGAAGT ATTTGATTAT CATGCCTAAT GCATGAGCCA TGTCACCCAG ATTTCTATCT TAACAATCAA ATATCTTTGG TGATGTTATG CTGCCTCCCA TATAAGGAGA CATGCACCAC GGGATTACAG AGTCTCACTT TGAAGCCTTC TCAGTATAGC

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FIGURE 16 (31)

FIGURE 16 (32)

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TCATGCC1	raa	TTGTTATTGA	ATAGTCTTCA	TCATGCCTAA TTGTTATTGA ATAGTCTTCA CTTCTTGTCA TCCAGTTTCT GGTCTCTTAT	TCCAGTTTCT	GGTCTCTTAT
TTCACTC1	raa	TTCACTCTAA GTCTAATTGG	CTATTAGAAT	CTATTAGAAT AAAGAGCTTG TAACAGATTC	TAACAGATTC	TTTCTCCAAT
ATGTCTT	ATC	TTTTGACTGC	ATGCCAGTGA	ATGTCTTATC TTTTGACTGC ATGCCAGTGA CAAACTGTTA ACTGTTTTGA	ACTGTTTTGA	TTCTTCATAA
CATTCCAC	;AG	AACATGCTGA	CTCCTCTCTT	CATTCCACAG AACATGCTGA CTCCTCTTT CCTGAAAGCA ATGCCCAAGC ACAGCATTGT	ATGCCCAAGC	ACAGCATTGT
TAGATAGTAT	PAT	GTACGCAACA	GGGACATGGG	GTACGCAACA GGGACATGGG TGCATAGCAA AAACTAGAAG GAAGGAGGAC	AAACTAGAAG	GAAGGAGGAC
CTTCCTTA	\GC	AATGGGTGAT	ATGGTCCCTG	CTTCCTTAGC AATGGGTGAT ATGGTCCCTG GACTTAGACT CCAAAGGGTC	CCAAAGGGTC	GTGAGGTGAA
ACACACAT	ည	TCCATACCCA	GGAAGCACAC	ACACACATCG TCCATACCCA GGAAGCACAC AGGTGGGATG GAAGAGCTGT		GCCTAATGAA
ACTTCATC	CA	CGTGGAGGTG	GAGGAGGCTG	ACTTCATCCA CGTGGAGGTG GAGGAGGCTG CAGCTGCAAG AACTCAGAGC TGCCTTACCC	AACTCAGAGC	TGCCTTACCC
AGACCAGG	iGA	CCAGGGAGGG	CTTTCTGGAG	AGACCAGGGA CCAGGGAGGG CTTTCTGGAG GAAACAGCCT CTGAACTGCC AGCTGATAGA	CTGAACTGCC	AGCTGATAGA
GGAGCTCT	AC	CTCAACTCTT	CTGGTTCCCC	GGAGCTCTAC CTCAACTCTT CTGGTTCCCC AGGGCTGCTT	TTCCACGTCC ATTTATTGGC	ATTTATTGGC
ACTGAAGTTT		GAATACCTTC	AGGGCCCGA	GAATACCTTC AGGGGCCCGA AAGCCTGCCA GGTCCTCTTC TCTGCAGAGC	GGTCCTCTTC	TCTGCAGAGC

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ATCCTGG CAGCTJ	CGCCTTT TCTCCTTCTC	CTGCAAG GTGAGACA	TCTTCCT CCAGTAGAG	ATGCCTG CCTGCTTCC	ATTCTCT TCCCTTCCCC	CCTTCTC CCTCTCCTT	CITCCIT ICCCITCCIC	TITCCTICCT CATITCCTCC CTICCTICCT ICCTICCTIC
CTCAGG GGCCACTGAA TAC		GCTGAG AAGTCAACCT TTC	AGAGCA AATGGAAGGT CCT	AACAGG AAAAGCACAA TGC	CTTCCTCCCT	ттсссс тсссстсссс ттс	CCTTTCCCCT	CCCTTC TTTCCTTCCT CAT
GTTCACTGGA AGGA	TCTGACTCAA GGAT	GAGGACGCAA ATGI	CCAGCAGAAA GAAG	TCTGGCAGCC ACCC	CGTTTCTCCC TCCC	TCCCCTCCCT TCCC	CCCTTCCTTC CTCT	TCCCTTCTTT CCTTCCCTTC
	GTTCACTGGA AGGACTCAGG GGCCACTGAA TACATCCTGG CAGCTTTCAC AAGAAGGGCT	GTTCACTGGA AGGACTCAGG GGCCACTGAA TACATCCTGG CAGG					· · · · · · · · · · · · · · · · · · ·	GTTCACTGGA AGGACTCAGG GGCCACTGAA TACATCCTGG CAGG TCTGACTCAA GGATGTTTCC ATCTTTGCCA GGTCGCCTTT TCTG GAGGACGCAA ATGTGCTGAG AAGTCAACCT TTCCTGCAAG GTG2 CCAGCAGAAA GAAGAGGA AATGGAAGGT CCTTCTTCCT CCAG TCTGGCAGCC ACCCAACAGG AAAAGCACAA TGCATGCCTG CCTG TCTCGCCACCCT TCCCTCCCTC CTTCCTCCCT TCCCTTCTCT TCCC TCCCCTCCCT

FIGURE 16 (33)

FIGURE 16 (34)

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AAGACAGAAT TACTCATTCT AAAAGGAGCT AATCCTTCCC	TTAAGATACA GATTCCTTAC TCTCTGTTAA CAACATTCTA	TTTAATATAA GAACACTCAA AAAAAAAGCT GACCCATCTC	GAGGCTCAAC CTCACTGGAA GATGGAAAAG ATATACTTCT	CTCCAAACTA TGAAGTGTTT GAGGCTCAAC TTTAATATAA TTAAGATACA AAGACAGAAT GAGAGAAAGA GACACTCAA GATTCCTTAC TACTCATTCT CTAAAATTAC AATTGTTCTA GATGGAAAAG AAAAAAAGCT TCTCTGTTAA AAAAGGAGCT TGTGCTATAG GAGGTTTAAA ATATACTTCT GACCCATCTC CAACATTCTA AATCCTTCCC	CTCCAAACTA GAGAGAAAGA CTAAAATTAC TGTGCTATAG
AAGACAGAAT	TTAAGATACA	ТТТААТАТАА	GAGGCTCAAC	TGAAGTGTTT	CTCCAAACTA
TGCCGATCTC	CTGTGCCTCA CTGGAATGGT	CTGTGCCTCA	ATAGCAGATG	ATTGAAAGGA ATCCAAAAGC ATAGCAGATG	ATTGAAAGGA
TTAAGGGGAG	GTGGGTACAA	AAAGAGAGCT	CTTTCTGAGT	TAGAGAAATC TGGACTGATC CTTTCTGAGT AAAGAGAGCT GTGGGTACAA TTAAGGGGAG	TAGAGAAATC
ATAACATTTG	TGTCTATGGA	GTCATGTGTA	ACTGTGTATA	CAACATCAGA GAAAATAGAT ACTGTGTATA GTCATGTGTA TGTCTATGGA ATAACATTTG	CAACATCAGA
GTTGGAAGAA	TGACCTATTA	ATAATCTAAA	ACACAAAACA	AGGGAAACAA GAAAAGAGAA ACACAAAACA ATAATCTAAA TGACCTATTA GTTGGAAGAA	AGGGAAACAA
GCTGACAGGG	TTAATTAAAA GCTGACAGGG	TACACTTCTC	AATGAAAAGA	AATTATGCAG TATACTAACC AATGAAAAGA TACACTTCTC	AATTATGCAG
TGTACGCATA	TGGTTAAAAA	ТАААААТТАА	GTAAAAGAGC	TTTTACTGAA TTAAAAATTA GTAAAAGAGC TAAAAATTAA TGGTTAAAAA TGTACGCATA	TTTTACTGAA
GCCACTTGCC	AGACATGGAA	AAAAAATGAA	CTTCTCTGTC	TGTAATGTCT GCCCCTTCCT CTTCTCTGTC AAAAATGAA AGACATGGAA GCCACTTGCC	TGTAATGTCT

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CTGGAGCAGG AATAGACCAG GCCAATCCCA AGAAATATTC AATCAAATTG CTGGAAAGAA AAATACAAAA TTAAGTAATA TAATTGTCTA GTAATTGGGG GAAGAAATAA GCTTATTCCT TATCTCATTT TTTTGAGACA GAGTCTCACT CTGGTAGCCC AGGCTGGAGT GCAGCGATGC GATCTCTGCC CACTGCAACC TTGCTCTCCC GGGCTCAGGC GATTCTCCCA CCTCAGCCTC TAAAGGTGGC ACAGTGAACC AATGGGAAAA AAATTAATCT TATAATAATT TCCATTTTA GCTGGTCTTG AACTCCTGGG CTCAGGCAAT TGAGCCACCG CGCCTGGCAG TTTTTATGTA GGCCAACTAT CAAGTCCCGG AATGTGGACT TGCAAATGCA CCGAGCAGCT GAACTACAGG CGTGTGCCAC CACTCCCGGC AATTTTTTT TAAATCAGAA ATTACAGGCA CTCATTTTTT AGACTAAATA AATTGGAGAT GGCTAAAAGA CGACAGTAAT TGTTGCCTGG CCACCCGCCT TGGCCTCCCA AAGTGCTAGC TATTAGGAAG AGACAGACAT GGTTTCACCA CAGATCAATG TGATATGCAA AGAAAAGTAT GATATTGCAA CTTTTTTCT TATTAAAATG GTAGAAATGG

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FIGURE 16 (35)

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TCCAGAACCG	INIMITAMAN ICCCGICCIA ANCCICAGAG ICCAGAACCG ATAATATGTT TAAATTTTG IGCTTTAAAA ACTACAAATA	TCCCGICCIA		CATCCTAACA CTGGTCATGC	CATCCTAACA
GGAAAAATAC	TAGTTGCTTA	GGGCTGATTT	TTTCTTCATT GGGCTGATTT	CATTTGCTGA TGTTAACTAT	CATTTGCTGA
CTTAGCTTAG	ACAATG AAAATTTGGG GCATATCAAA ATGACCTTGG CTTAGCTTAG	GCATATCAAA	AAAATTTGGG	GTTTACAATG	AAGAGATATA GTTT
TTATTGAGTC	TTGAACTTGT	ACTTTTATGA	CTATGC ATGTATGGAG ACTTTTATGA TTGAACTTGT		CCAAAATTAG TAAA
TCTATTAACA	GTTACAATTA AAGTTGAGCT ACCTCTGACA TCTATTAACA	AAGTTGAGCT	GTTACAATTA	TTGCATAGGG	TGGCGGTTGT
ACCAGGAGAC	AGCATCCTAG TCCTCTTGTC CCTGTAAAAG TTAACCCTTA CACCTGAAAC ACCAGGAGAC	TTAACCCTTA	CCTGTAAAAG	TCCTCTTGTC	AGCATCCTAG
TTAAAAATA	CTCCCCACTC AAGGTAGGAG TCTCTCAGAT	AAGGTAGGAG	CTCCCCACTC	TATAAAATGA TGAACTCAAT	TATAAAATGA
GGACCTGACT	ATTTTTTCTC CAGAAATTTT GCATTGATTC CCTGAAGAAG CATTAATATG GGACCTGACT	CCTGAAGAAG	GCATTGATTC	CAGAAATTTT	ATTTTTCTC
TTCTAAAAAT	TTAAAAATTA	TTCAAAGCAT	TACCCAGTTT	AGATGCAAGA CTATAAAACA TACCCAGTTT	AGATGCAAGA
CACCAACCAA	TTTAAGGATA TCTGCTGGAA CCAATCATGC CACCAACCAA	TCTGCTGGAA		GTTTTTTAAAA AGTTTTTTT	GTTTTTAAAA

FIGURE 16 (37)

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CTCTACTTGC	TACAGTTTTA	GAGTGGTCCA	CTTCTTCTCT	GGCTGCTAGT CGAAATCCCA CTTCTTCTT GAGTGGTCCA TACAGTTTTA CTCTACTTGC	GGCTGCTAGT
GCAGCAAACA	ATAAGC AAGTCTCAAG CCAGAGAGAG GTGGTATCAG GCAGCAAACA	CCAGAGAGAG	AAGTCTCAAG	TTTAATAAGC	CAGACCTCAC TTTA
AGAGTGTGAT	TTTTCCAGTA GCCAAAGCAG AGAGTGTGAT	TTTTCCAGTA	CGGATCTGCG	GGCCACAGCT	GCCAAAAGTG GGCC
TATCAACGTT	ATGCAC CCAATGGCTG CACTAAGTGA ATGCATGCGC TATCAACGTT	CACTAAGTGA	CCAATGGCTG	GCCCATGCAC	TGGCTCCAGA GCCC
ATCTAATCAT	CACAGCTACT ATGGTGGAGA TGAGATTTAA ATCTAATCAT	ATGGTGGAGA	CACAGCTACT	CTATTC	CTGAGCAACT GGGC
CCCAGAGAGG	ATCATCTCCA TTTTACAGAT AAGGAATAGA CCCAGAGAGG	TTTACAGAT	ATCATCTCCA	AGGCACTGTT	CATCTGAGGC AGGC
CTCAAGGAAC	TCATTTCATC	ATATATTAAC	AGCACTTTAC	CTTACTGTGA GCCTGTTCTA AGCACTTTAC ATATATTAAC TCATTTCATC	CTTACTGTGA
TTGCTGAGCT	CTAATA CACAAACAC CCCAAATAAA TAGCCAGCAT	CCCAAATAAA	CACAAAACAC		CGCAAGGGAT AAGA
ACATGAATAA	GAGAACTGGG	AAAAAAAAT	CACAGGCAAA	TAGAAATGAG GAAACTGGGA CACAGGCAAA AAAAAAAAT GAGAACTGGG ACATGAATAA	TAGAAATGAG
GAACAGAGTC	TCAAAAGGAC AAAATAAGGG GAACAGAGTC	TCAAAAGGAC	ACAACATATA	TAAAGACTTA AAATGGCTTA ACAACATATA	TAAAGACTTA
TTAGCATAGT	CGAGGGAAGA	GTCAGTTAGC	ACAATCAATG	AGGAATGTAT TAATAGTTCC ACAATCAATG GTCAGTTAGC CGAGGGAAGA TTAGCATAGT	AGGAATGTAT

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CAGGCATGGT GCTGGTTGCC TGTATTCCCA GATACTCAGG TTACAGAATG AAAATAGCTG GAGTTCAGGT GCGCTTTCAA TGCCCTGTTG TCAGGATTGG TTACAATTAA TGAGCCAGGG TTGGGAGGCA GAGGCAAGCG GTTGCAGTAA GCCGAGATCG TCGAGACTAG CCTGACCAAC ATGGTAAACC CTTTCTGTAC TCTCAAAAA AAAAAAAAA GTACTTTTA GAAAATTTTT CGTATACCTC ACACCCAGTT GICATITITC AGIICCAGGA TGAGACATTA TTAATAGACT AGAGAGTTCC TCCCAGCACT GGAGGCGGAG CGAGACTCCA GAGCCAATAT TTTACCTGCT GGTACATTTG AGGATAGTAC AGGCCCCTAA GTTGTTGTTT ACATTCATGC CTTGAACCAG GGCAACAGAG GAAAATTAAT TTTCTTAGTT GGTCAGGAGT AGATTTACAG AAAGATTGAG TTAACCTCTT TAAAAATACA AAAAATTAGC CCGGCCGGGC ACAGTGGTTC TTTATTTTT AGGCTGAGGC ACAAGAATTG CTCCAGCCTG AAAAGAAGGA AGGAAGGAAG AGTCCATGCT TTATGCAGAT AATCACTTGA GCTTTTCAAG TGCCACTGCA TCTGCAATTA

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FIGURE 16 (38)

FIGURE 16 (39)

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TACCTGAGAC	TCATGCTGCT GATAAAGATA		TAGTCTTTTT	CTTGGTGTAT	TTCTTGAAAG
ATCGCTGGAA	TGTTCTGTTT	TTGATTCTCT	TAGTTACTCC TTGATTCTCT	AAAAAATGTT TCCTGCAATC	AAAAAATGTT
TTAAAAAATG	CTCTCAGGCT	GCTCAGGATT	CCAGAAACAT	TTTCTCCTTT TTCTGTTTGC CCAGAACAT GCTCAGGATT	TTTCTCCTTT
CTGTTGACTC	TTTCACCATC AGTTTTTTT	TTTCACCATC	ACTAATTŢŢŢ	CACTCAGAAA ATTTAACTTG ACTAATTTTT	CACTCAGAAA
CTGCTTTAAT	CACTAACCAT ATCTTCAACT TTGATAAGTA CTGCTTTAAT	ATCTTCAACT		AATTTCAGGC ACTCTGTTTT	AATTTCAGGC
ATTTACAAGA CTTATGTTCG		CTTATATGCA ATAATTGTCC	CTTATATGCA	GCGACTTCTT AAGCTGCAGC	GCGACTTCTT
CCAGGTAAAG CATATTTCGT		GAGCATTTTT	GGGTACACAC	CTCCTGCCAG ATGATGAACT GGGTACACAC GAGCATTTTT	CTCCTGCCAG
TGAAAGAACT GCTGCTTAGC		CTGTGCCGAT	TCTTTGTTT	GTGTTTCAAG GTAATAAACT	GTGTTTCAAG
GCCCATAACA	TGTTACGTTG	AACAGCCTAA	CACTTATACA	TACAGCTCAA TATTTTCAAG CACTTATACA AACAGCCTAA TGTTACGTTG GCCCATAACA	TACAGCTCAA
TCCTTGAAAT	TAGCATAATT	CTGAGAACTT	TCTGCAGAGC	GACTGAGTTT TAATCTACTT	GACTGAGTTT
CTCTTGGCTA	GCTTAGGCTC	TCTCATATCT	CACATTTAGT	ATGCATTCAG GATGCCATAC CACATTTAGT TCTCATATCT GCTTAGGCTC CTCTTGGCTA	ATGCATTCAG

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TGGATAATTT ATAAAGAAAA AGAGGTTTAA TGGACTCACA GTTCCACGTG GCTGAGGAAG TGTCTTACAT GGCAGCAGAC AAGAGAAT TTCACTACCA TCTCCCACCG GGGCCCTCCC ATTTGGGTGG GGACATGGCC TTATTCCTCA TTTCTACCTG AAACTGCTCT TTTGAGGGTA CTCAATTCCG TTCCTTCTTA TGCCTTTGGA CAGAATCTGC CTCACCTCTT TGACTTCTCT GTGAGACTTA CCCCATCCTT CTCACTTGGT GATTCAATTA TCAAGATGAC ATCAGATCTT TCCATTTCTT CCCCCTCCTT TAAAGTGTCT GCAAAAGGCA CCGCCCCCAT TTATAAAACC GAGCTACAAT TAGCATTATT GTCACCTTTT TTTTTTTTT CCTTGTTTCC ATGGTGGAAG ATGGGGTAAA GGAATTATGG CCAAAATACT GTGTTGGTTG GGATTTCCCC ACCTGGCCTA AACCGGTACA ACCAGACCTC ATTTCTTTT CCCTAAATGT CCTCACAATC CAAGAACAAT GAGAACCAAG GCTGATAAGT AAACCATATC GCAATTGACT ACAACACGTG AATGATCATG CCCTCCCATC SUBSTITUTE SHEET (Rule 26)

FIGURE 16 (40)

FIGURE 16 (41)

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GATACAGAGG	TTTGGTATTT GTGGGCATA CTGGGACCAA TTCCCCCATG GATACAGAGG	CTGGGACCAA	GTGGGGCATA	TTTGGTATTT	ATCTGTGAAG
GGACTTGAGC	TATATATAAG	AGTACACCAT	AATGATTTCA	TATAGATCTT ATAATCTAGA AATGATTTCA AGTACACCAT TATATATAAG GGACTTGAGC	TATAGATCTT
CACTGTAGCG	TATAACAACT ACAGCATTTA CACTGTAGCG		TTATTCCCTA AACAATACAG	TTATTCCCTA	TTTCTTGTCA
AAAAATTTTA	CTGAGTATGA	AGCGTCTATA	TGAAGAAAAA	AACTGTAGAT GGAAAATATT TGAAGAAAAA AGCGTCTATA CTGAGTATGA AAAAATTTTA	AACTGTAGAT
GGATTCAACC	CTGCATCCCT GGATTCAACC	TCTGTGGTTT	GCCCTTTGTA	TCATCTAGCA AGAAGAGTTG GCCCTTTGTA TCTGTGGTTT	TCATCTAGCA
CTATGATCAT	TTTTTCTATT TCCCTCCTG CTATGATCAT	TTTTTCTATT	TGACAATATC	AAGTGTTATC AATGATTACT TGACAATATC	AAGTGTTATC
AATTAGTAGC	TGAATTTCTC ACCATAACCT CTCTTTTGTC TCCCATAATC AATTAGTAGC	CTCTTTTGTC	ACCATAACCT	TGAATTTCTC	CTTAAAACCT
GGAGCCCAGA	TITCCIATIA GIACICCIGC ACTICICCCA GGAGCCCAGA	GTACTCCTGC		TTCCTCTTAA GCTTTTCTTA	TTCCTCTTAA
ATCAAATCGT	AATCTTTCCC	TCTAACACAT	CTGCTAAATA	ATCTCTCCAA TGTATTTAAC CTGCTAAATA TCTAACACAT AATCTTTCCC ATCAAATCGT	ATCTCTCCAA
CCAATTGAGT	CCAGACATTT	TCAAATGTCC	TCTCCCATTT	GTCTTTCTCT TAAGTTCCAG TCTCCCATTT TCAAATGTCC CCAGACATTT CCAATTGAGT	GTCTTTCTCT
AATAACTCTG	CATCTGTGTC	TACATTATTG	GGGTCTTTAT	ATGCCCTGTC ATTCACTCAT GGGTCTTTAT TACATTATTG CATCTGTGTC AATAACTCTG	ATGCCCTGTC

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ATTAGTCAGG	TAGGAAG ACACAATCTC TACAAAAAA AATCCACAAA ATTAGTCAGG	TACAAAAAA	ACACAATCTC	ATATAGGAAG	GAGCTGGGAT ATA	
AGTTCGAGAC	TAAGGCCAGG	TTTGGGAAGC	ATCCCAACAC	TGTGGTGGCT CAAACCTGTA ATCCCAACAC TTTGGGAAGC TAAGGCCAGG AGTTCGAGAC	TGTGGTGGCT	
CTTGGCCAGA	AAATGCATTT	TGCCTGTGAA	ATTTAAT GGCTGCACCT TGCCTGTGAA AAATGCATTT	AACATTTAAT	AACAACGAAA AAC	
CAATAACAAC	AGCCTGG GTGACACAGC AAGACTCTAT CTCAAAACAA CAATAACAAC	AAGACTCTAT	GTGACACAGC	TCCAGCCTGG	TCCACTGCAC TCC	
CCAAGATCTC	TTGCAGTGAG	GAGGTGGAGT	TTTAATCTGG	GGCTGAGGCA AGAGAATCGC TTTAATCTGG GAGGTGGAGT TTGCAGTGAG CCAAGATCTC	GGCTGAGGCA	(D. 1- 20)
CTACTCACGA	GTGGTCCCAG	GCATTTGCCT	AGGTGCTGGA	AAAAAGTATA AAAGTTAACC AGGTGCTGGA GCATTTGCCT GTGGTCCCAG CTACTCACG	AAAAAGTATA	CITCE
TGTCTCTACA	GGCGAAACCC	TGGCCAACAT	CAGACCAGCC	TCACTTGAGG TCAGGAGTTC CAGACCAGCC TGGCCAACAT GGCGAAACCC TGTCTCTAC?	TCACTTGAGG	
GGGGGGTGTZ	CAGCATTTTG GGAGGCCAAG GGGGGGTGTA	CAGCATTTTG	CTTGTAATCC	GCCAGGCGCA GTGGCTCACA CTTGTAATCC	GCCAGGCGCA	01.10
TATTTAATGO	GTCATCTCCA AGCTTAAAAA TATTTAATGO	GTCATCTCCA	TTCTAATTTT	TGTACCTTCA GAATATTCTA TTCTAATTTT	TGTACCTTCA	
CAATGCCAGG	GCCCCTTGCC AATTAATTCA ATAGTGCTGC CAATGCCAGG	AATTAATTCA		TGTTTTCCTG TCTTTAGTTT	TGTTTTCCTG	
TTTCTTTTC	CCAATGTGTT	TACCAGTTGG	GCTTACTAAA	GACAACTATA TTTACTCAGT GCTTACTAAA TACCAGTTGG CCAATGTGTT TTTCTTTTT	GACAACTATA	

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FIGURE 16 (42)

FIGURE 16 (43)

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TTTGGCATTT	CCTCTTCCTT AAAGTTTAAG AACTCATTTT CATGAATCTT	AACTCATTTT	AAAGTTTAAG	CCTCTTCCTT	AAAGAGCTTT
TCCATTTCAA	GAACTCTATA CCCAACTTTA AAAACCTAGC TCAAAGTTCA ACACTTCCAT TCCATTTCAA	TCAAAGTTCA	AAAACCTAGC	CCCAACTTTA	GAACTCTATA
TTCCTGTGTT	TGTACTCATC	TTACCTTTTC TGGAATGTCC TGTACTCATC		CCATGCCTTT GCTCACACCA	CCATGCCTTT
TGCCATTCTT	AAATCAAGTT	TCATCAGTGG	CTAATAGTTG	CACTTTTTAA CCAAATTAGA CTAATAGTTG TCATCAGTGG AAATCAAGTT	CACTTTTAA
ACAGACAACA	GTAAATCAAA CCTTAATTGA CTTTTTAGCC AGTTATGCTA CTAGCCAACT ACAGACAACA	AGTTATGCTA	CTTTTAGCC	CCTTAATTGA	GTAAATCAAA
TAATGGCCTC	GCCTGACATT	GTTAGCATCA	AAACTACTAC	AAGCTATAAA AAAAGTTGA AAACTACTAC GTTAGCATCA GCCTGACATT	AAGCTATAAA
TTAAAAAACA	ATATTAATTT	CTCCCATTGC	AGCAGTTGTG	GGGAGGAAGC ATTTAGCCAG AGCAGTTGTG CTCCCATTGC ATATTAATTT	GGGAGGAAGC
TGAGTGCAAT	CATGGAACTC CTTAAAAGCA TCAGAGTATG	CTTAAAAGCA		CTGTAGAGTC CTAAGGGTTC	CTGTAGAGTC
GAGTTCTTCT	AGCAAGGTCC TATCTCTGGA GAAAAAAA AAAGAAGGCA TTTCTTAGGA GAGTTCTTCT	AAAGAAGGCA	GAAAAAAAA	TATCTCTGGA	AGCAAGGTCC
TGGGTGACAG	CAGGAGTTCA AGGCTTCCGT GAGCTATGAT GGCACAACTG CACTCCATCT TGGGTGACAG	GGCACAACTG	GAGCTATGAT	AGGCTTCCGT	CAGGAGTTCA
TCCTCAAGCC	CTTAGTGTTC ATGCCTGTAG TCCCAGGTAC TCAGGAGGCT GAGGCAGGAT TCCTCAAGCC	TCAGGAGGCT	TCCCAGGTAC	ATGCCTGTAG	CTTAGTGTTC

FIGURE 16 (44)

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CCAGCCTGGC TGGGCCTGGT CTTGAACCCG	CCCTTTGGGA GACCAAGGTG GGTGGATCAC CAGAAGTCAG AAGCCTGAGA CCAGCCTGGC CAATGTGGTG AAACTCCGTC TCTACTAAAG ATACATAAAT TAGATCTAGC TGGGCCTGGT GGCGTGTACC TGTAGTCCCA GATACTCAGG AGGCTGAGGT AGGATAATCA CTTGAACCCG GAAGACAGAG GTTGCAGTGA GCTTGTGCCA CTGCACTCCA GCCGGGGCAA CAGAGTGAGA	CAGAAGTCAG ATACATAAAT AGGCTGAGGT CTGCACTCCA	GGTGGATCAC TCTACTAAAG GATACTCAGG	CCCTTTGGGA GACCAAGGTG GGTGGATCAC CAGAAGTCAG CAATGTGGTG AAACTCCGTC TCTACTAAAG ATACATAAAT GGCGTGTACC TGTAGTCCCA GATACTCAGG AGGCTGAGGT GAAGACAGAG GTTGCAGTGA GCTTGTGCCA CTGCACTCCA	CCCTTTGGGA CAATGTGGTG GGCGTGTACC
CCAGCCTGGC	AAGCCTGAGA	CAGAAGTCAG	GGTGGATCAC	GACCAAGGTG	CCCTTTGGGA
GTAATCCCAG	GCTCATGCCT	GGGCACGGTG	ACAAGAGGCT	TTCTTGTGGG AACTAATGGG ACAAGAGGCT GGGCACGGTG GCTCATGCCT	TTCTTGTGGG
CAACAATCAG	CATTCTCTTT	AGGAGGGTGC	GAAGGAAGAA	CAAGAGGGA GGAAAAAAG GAAGGAAGAA AGGAGGGTGC CATTCTTTT	CAAGAGAGGA
CATCACATAT	CACCCATGGT AGAAGGCAAA GGGGAGCAGG	AGAAGGCAAA		TGAGGGCTTC AGGAAGTTTC	TGAGGGCTTC
CTGCTTCAGG	TTTATTTGGC TCACAGTTCT GCAGCTATAT AAGAAGCATA GTGTCAGCAT CTGCTTCAGG	AAGAAGCATA	GCAGCTATAT	TCACAGTTCT	TTTATTTGGC
AAAAAAGAGG	AGTCTGTTTG TGTTGCTATA AAGGAATACC TGAGGCTGGG GAATTTATTT AAAAAAAGAGG	TGAGGCTGGG	AAGGAATACC	TGTTGCTATA	AGTCTGTTTG
ATAGTGTCTT	TCTATCTTTC	TAAACACCTT	TAACGGCAAA AATGATGCTC	TAACGGCAAA	TTAGACTCCT
CCAAGGTGTT	TGTTCATGCC TCATATGCCC CCAAGGTGTT		GTGTTATTTG	ATTGCACACA TGCTTGCTTT	ATTGCACACA

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213/285		224/285
214/285		225/285
215/285		226/285

FIGURE 16 (45)

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AGCATAAACT	GGTCATTAAT AACTCAAACA AGGACATAAC AAAGAAATGG AGCATAAACT	AGGACATAAC	AACTCAAACA		GGAAAACTTG
CTTTATAGAT	AACTCATTAA GGCTTCCAAT ATTTTGGAG ATAAGAAGGG CTGCTATGCT CTTTATAGAT	ATAAGAAGGG	ATTTTTGGAG	GGCTTCCAAT	AACTCATTAA
CGAAGACATT	TTATTTTGAT GAATTCACAT	TTATTTGAT	TTTTGCACCT	TAGTTCACTT	ACTTTGTCTG
ATCCTTCTTC	TTATCAGTAA TACCCAAGGG GGTAGAAATG GTAAGTAATA ATCCTTCTTC	GGTAGAAATG	TACCCAAGGG	TTATCAGTAA	ATTATCTTGT
AAAAAAGCAA	AGAACAAGAG AAATCATGAA AAGGAGGGG AATATAAGAA TAATACATAG AAAAAAGCAA	AATATAAGAA	AAGGAGGGG	AAATCATGAA	AGAACAAGAG
TCAAGAGAAA	GTGTGTTCAT GTAAAAGAGA TCAAGAGAAA		TTGTGTGTGT	AAAAAATGT ATAGTCAGTT	AAAAAATGT
AAAAGGAGAA	TCTGCTTTCC TATGGTCTCG CTCTAGAGGG GGTCAGTATG AGTTTCTGTC AAAAGGAGAA	GGTCAGTATG	CTCTAGAGGG	TATGGTCTCG	TCTGCTTTCC
GCTAACCAAA	GAACATAGTA CCTTATCTAT AGAAAGCAAT GGCTAGACAA CTGTTGAATG GCTAACCAAA	GGCTAGACAA	AGAAAGCAAT	ССТТАТСТАТ	GAACATAGTA
ACATAGTAAT	GGATCAATTT CCGTATGAGA TTTGGAGGAG ACAAATATCC AAACTATATC ACATAGTAAT	ACAAATATCC	TTTGGAGGAG	CCGTATGAGA	GGATCAATTT
CCAACACTGG	AGGAGGGATC CACCCCCAAT GACTCAAATA CCTCCCACCA GGCCTCACTT CCAACACTGG	CCTCCCACCA	GACTCAAATA	CACCCCCAAT	AGGAGGGATC
CAAGTTATTC	CGGTCTCAAA AAATTTTAAA AACTTTAAAA ATAATAGAGC AAGAAAGCAC CAAGTTATTC	ATAATAGAGC	AACTTTAAAA	AAATTTTAAA	CGGTCTCAAA

FIGURE 16 (46)

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AGATTTTCATT AAATATCTCT	GGATTT TTGAGTAATG GCTTTTACTTC TGTAGAAGG AGATTTCATT GGATTT GGTTCAACAA ACTGGAGTAC AGGTTTCAGA AAATATCTCT	ACTGGAGTAC	TTGAGTAATG	TTGGTTGATT TCAGGGATTT	TGAAGTCCAC TCAG
GTAAGATGGC	TTCCATTGCT	GCTGACTAGT	CGTGGAAACA GCTGACTAGT	TTCAGTTCTA	TTTTTCTGAA TTCA
AAAATGGATA	CTTGACTTTT TCCAAGCAGA AATTACAGCT GATGACAAGC TGCTGCTGAG AAAATGGATA	GATGACAAGC	AATTACAGCT	TCCAAGCAGA	CTTGACTTTT
CGAAGCATCA	TGTTGGACTG	ATCTATGTAA	TCCATGTTAT	ATGGAGAAGT GGCTACTGCA TCCATGTTAT ATCTATGTAA TGTTGGACTG	ATGGAGAAGT
AGTTTTGCTC	TTCCTTTAAT TGTACTTTTG CAGGCTTGTC AGTTTTGCTC	TGTACTTTTG	TTCCTTTAAT	TACTCAAGCG ATGCAAATGA	TACTCAAGCG
CAATCTGGAG	CCAAGAACCT AGCTGAAGCC TGTAGAATGA ATAGGTAAGT ACTGCCATGC CAATCTGGAG	ATAGGTAAGT	TGTAGAATGA	AGCTGAAGCC	CCAAGAACCT
ACAGATCTCA	TTCTTCGAGC ACTTACTGAG TGTATATCAT TGTGTTCTCA CGCAGCACCC ACAGATCTCA	TGTGTTCTCA	TGTATATCAT	ACTTACTGAG	TTCTTCGAGC
ACAGTAAGTG	GGGATTATCA TAGCTCCTTT AAGGTCCCCT CTATGCACTC AATAACATCA ACAGTAAGTG	CTATGCACTC	AAGGTCCCCT	TAGCTCCTTT	GGGATTATCA
CATCACCCTT	AGTGATTTCC	CTTGTGCATA GGAAATTCAT		ATGATCTTT	TCCTAAAGTT
TTGTTACTCT	GCCAGGTCCT GACTGTAGAT TTGGATTCCC AGTTGGTGTC TTGTCACCCT TTGTTACTCT	AGTTGGTGTC	TTGGATTCCC	GACTGTAGAT	GCCAGGTCCT

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CTTTGCAG	CTGCTTTT	TTTGAATT	TTTCTCAATC	GAGAAATA	AGATCTTC	TGGCTTAT	AAGACACT	TTTCACTC	GCACTAAT	TCTCCCAA
TTTCTCATCT ATAATTCCTG GAACACTTCA TCCTTTGCAG	GTTGCTCACT GTGTTCTGAT TGCCACTTTG ACCTGCTTTT	TCTCATTAAT TGTTTGAATT		CTTGGTCCAT AAGGTAACAG TCTTATTTCT GACTATCAAG GAGAAAATA	CATGGTGTCA CTTTTGAAAA CTGGTCCTCT GTAGATCTTC	TAACAAAATT GCATAGACAG CATGGCTTAT	AAATAACAGA AATGTATTTC TGACAGTTCT GAAGGCTAGA AAGTCAAAGA TTAAGACACT	TGCTCATAGA TGGACGATGA CCTTTCACTC	TGTCTGCACA TGGCAGAAGG GCAAGAGAGC TCTCTGGGTC TTTTTTATAA GGGCACTAAT	TAATCACCTC CCAAAGGCAC TGTCTCCCAA
ATAATTCCTG	GTGTTCTGAT		CTCATTAGCA AGAAGTCCAG TATCTTCCTG AGAACTTCCT	TCTTATTTCT	CTTTTGAAAA		GAAGGCTAGA	TGCTCATAGA	TCTCTGGGTC	TAATCACCTC
TTTCTCATCT	GTTGCTCACT	TTACAAATAG AACAGAATCT CTCTGATTTT	AGAAGTCCAG	AAGGTAACAG	CATGGTGTCA	TCAGCTGCTA	TGACAGTTCT	AAGGCCCATT	GCAAGAGAGC	AGGACCCTGC CCCCATGACT
TTAATCCTCC AATAATAAAT	CCGAGCATAT AGATAGATTT	TTACAAATAG	CTCATTAGCA	CTTGGTCCAT	TTATCATCTT	GTTAGTCCAT	AATGTATTTC	GTGTCTGGCG AAGGCCCATT	TGGCAGAAGG	AGGACCCTGC
TTAATCCTCC	CCGAGCATAT	TCAACTTAGG	CCCACTTTTC	TAGGAACTTA	ACAGGAGCCA	AGATTCTTGC	AAATAACAGA	GGCTGATTTG	TGTCTGCACA	CTCATTTTTG
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FIGURE 16 (47)

FIGURE 16 (48)

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TACCATCACC TIGAGGGITA GGATITCAAC ATATGATITT GGGGGGACAG AAACACGCAG	TTCTTGCTGG ATCAGTTTCC TCCTTGGGGT	TATAGCAGGC CCGATAGCAA AGTATTCCAA	TGTTGGTATG CAGAGGCATT GAATAATCAG AATGAACCCA CGCCATAAAC AACTGGTAGA	GTTTTTA GTTCCTATGT	CTCCCA TAGTAGCCCC ACTGTGTTGA AGTGGCTGAA TCGACAGAAG	TATGAGCCGT ACAAGAGCTG	TCTTTCTTCA AGAGATTTTA TTTCAAGGAT ATTTTTCTT	TTAGAATCTT AGGGCAGTGG TGCCCAACCT TTTTGGCCCC	AGGGACAGGT TTTGTGGGAG ACAATTTTTC CATGGACCAG TGTCAGGGGG CTGGGAGGCA	GTCAAG TACATTACGT TTGTTGTATA CTTTATTTCT ATTATTATTA
T GGG	G ATC	יכ ככפ	'A CGC	A GTG	A AGT		'A TTT	G TGC	G TGT	'A CTT
ATATGATTT			AATGAACCC	CTGGGTAACA GTGGTTTTTA	ACTGTGTTG	CAATTCTCC	AGAGATTTT	AGGCAGTG	CATGGACCA	TTGTTGTAT
GGATTTCAAC	CATGGTGGTA	TGTCTA ACTTGCAAGT	GAATAATCAG	ATTATGAGCC	TAGTAGCCCC	CTCATGGAAC CAATTCTCCT	TCTTTCTTCA	TTAGAATCTT	ACAATTTTC	TACATTACGT
TTGAGGGTTA	TCCATCTCGC TTGTCCACTC CATGGTGGTA	TCCATGTCTA	CAGAGGCATT	GCTGCAGAGA GTACCAGCTG		GGGCCACATG	GGTTGCCATT CTGGATACCC	CAGGGATTAT	TTTGTGGGAG	ATGA
TACCATCACC	TCCATCTCGC	GCATTTGTGT	TGTTGGTATG	GCTGCAGAGA	CCGTCAGCCC TTTT	CTTCCAGCTT	GGTTGCCATT	TTATCAACTA CAGG	AGGGACAGGT	TGGTTTTGGG

FIGURE 16 (49)

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TATGACCTCA TITATAAGCC ACAGAACCAC CCGGGAAATC ATTATTAAGA CAAGGAAAGG CCAAGTGCAG CTGCCTTTAC TGTCTCATAG TGTTCTCCCC TCATGTCTCC AGGTCTCTCT GTCTCTTTC ACTATTCCAG ATAAGGTCAC ATTCTGAAGA ACTGGGAGTT TICCICICCT ICCCAAAGIT CTTCATAGCA GAGACAACTT GTACCAAAAG GAAATTGAGG CGAGTGGATC ACCTGAAGTC GACCAAACTG ACCAGCATGA CAGAACCCCA TCTTTACTAA AAATACAAAA GGAACACAGT TCAACCAATA ACAGCCCCTG TACTGTTTTA TTATTATGTA ACCTTAACCT AGGATCATAG ATCCCTACTT GTCTGGTGCT CTCAAAAGAC TGAGGCAGGA AAATCACTTG AACCGAGGAT GCCAAGATAG CAGTGAGCCA ATATCGTGCC ACTGCACTCC ATATTGGATT AAGGGCCAAC CCTACTCTAG CATGGTGCCA TGTGCCTGTA ATCCCAGCTA CTGTAATCCC AGCACTTTGG GAAACTAGTC ACATGCAATG ATCTTTTGAA AGGACTTCAT CAAATAGGTA TGGTTCATGC TTTGTATAAG TCTTAAGGTC GCAAAATACC AAGAGTTTGA ATTAGTTGGG

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FIGURE 16 (50)

FIGURE 16 (51)

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TCTACAAAAA AGCTACCTGG AGCTGAGATT AATAAAGAAT GCTCTGACAA AAGACAAAGG	TTGACATCAG GTGTTCGAGA CCAGCCTGGC CAACATGGTG AAAACTCATC TCTACAAAAA ATATGAAAAA AAAAAAAAG CTGGGTGTGT TGGCTTATGC CTGTAGTCTC AGCTACCTGG GAGGCTGAAG CAGGAGAATC ACTTGAACCC GGGAGTTGGA GGTTGCAGTG AGCTGAGATT GCCCTACTGT ACTCCAACCT GGGTGACAGA GAGAGACTCC ATCTCAAAAA AATAAAGAAT TCTTCGGGCA GCAGTCTTTC CTCCACCTCA TAGACCATGG AGGTGAGCCA GCTCTGACAA ACCATGAGAA CAATGGCAGA GACATACCTG TAACGTAACT GACTGGGGCA AAGACAAAGG TGAGGAAAAT GACAAGTTTG AGGAACTATG AGACCAGGCA GTGGGGAACA CCACTAGCAG	CAACATGGTG TGGCTTATGC GGGAGTTGGA GAGACTCC TAGACCATGG TAGACCATGG	TCGAGA CCAGCCTGGC AAAAAG CTGGGTGTGT AGAATC ACTTGAACCC CAACCT GGGTGACAGA TCTTTC CTCCACCTCA GGCAGA GACATACCTG AGTTTG AGGAACTATG	TTGACATCAG GTGTTCGAGA ATATGAAAAA AAAAAAAAG GAGGCTGAAG CAGGAGAATC GCCCTACTGT ACTCCAACCT TCTTCGGGCA GCAGTCTTTC ACCATGAGAA CAATGGCAGA TGAGGAAAAT GACAAGTTTG	TTGACATCAG GTGT ATATGAAAAA AAAA GAGGCTGAAG CAGG GCCCTACTGT ACTC TCTTCGGGCA GCAG ACCATGAGAA CAAT
GCTCTGACAA	AGGTGAGCCA	TAGACCATGG	CTCCACCTCA	GCAGTCTTTC	GGGCA
AATAAAGAAT	ATCTCAAAAA	GAGAGACTCC	GGGTGACAGA	ACTCCAACCT	TACTGT
AGCTGAGATT	GGTTGCAGTG	GGGAGTTGGA	ACTTGAACCC	CAGGAGAATC	CTGAAG
AGCTACCTGG	CTGTAGTCTC	TGGCTTATGC	CTGGGTGTGT	AAAAAAAAG	GAAAAA
TCTACAAAAA	AAAACTCATC	CAACATGGTG	CCAGCCTGGC	GTGTTCGAGA	CATCAG
GGTGGATCAC	GTAATCCCAG TACTTTGGGA GGCTGAGATG GGTGGATCAC	TACTTTGGGA	GTAATCCCAG	GCTCATGCCT	GGGCACAGTG GCTC
GCAGCAGGCT	TCCATT AGCAGCAACG TCAGGGATTG AATTCTTAGG GCAGCAGGCT	TCAGGGATTG	AGCAGCAACG	CCAGTCCATT	AAACAAACAC CCAG
TCTTTGGAGA	TCCAAGGAGA CCCTTCTGCT TTGCTAGTTC AGAGAACTTC TCTTTGGAGA	TTGCTAGTTC	CCCTTCTGCT	TCCAAGGAGA	GAAAGCCTTT
AAAAGACAAG	AGCAAG ATCCTGTCTC AAAAATTAA TAAATAAATA AAAAGACAAG	AAAAAATTAA	ATCCTGTCTC	ATAGAGCAAG	AGTCTGGATG ATAG

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FIGURE 16 (52)	(2				
AAATGATGGA	AAATGATGGA AGTTCTCAAG		AATAACAACA GAGAAATAGA	CCATGGCCAG AGTCTAGAAC	AGTCTAGAAC
CCTCCAGGGA	CCTCCAGGGA AAGGAGATGG GCTCCAGAGG CAGAAGAGGA CGTTGAAGGG AATGGGGAGT	GCTCCAGAGG	CAGAAGAGGA	CGTTGAAGGG	AATGGGGAGT
GGGTGAAATA	GGGTGAAATA TATAGACGAT GGGGACCACC CAAGAGCAGT	GGGGACCACC	CAAGAGCAGT	CGCTATTGCA AAACTGAGGA	AAACTGAGGA
GAAGGAGAGT	GAAGGAGAGT CTGGAGGGGG	TGGTGGGAAG	TGGTGGGAAG CTGGGTCTCC	TAAGGAGGTT	TTGACAAAAG
CAGTCATGGA	CAGTCATGGA GCGGGCTTAG	AAATCACAGT	TGGGGACAGG	GTAAAGTTCC	TCGGGATATA
GAGGATGAGA	GAGGATGAGA TTAGAAGAGG	TTCCAACTAG	TTCCAACTAG GGTAGTGTGG AGAAAAGCAC	AGAAAAGCAC	TATTGACCCA
AAAAGGAAGG	AAAAGGAAGG AGAATGTGGG	TGGAAGTGGC	TGGAAGTGGC AGAGAAGAG GGGTTTGAGC	GGGTTTGAGC	AGAGAGTGGT
GATTTTTCTA	GATTTTCTA ATGCAGAGTT	GTGGGAGGTG	GAGTGCAGGG	AGCCAGGCTG	GGTGGCTGTG
CTGATGTGAT	CTGATGTGAT TAAGCACTTA		CTGACTGCCA GGCAATGGGC TAAGTACCTG		AGATGCTTTG
TCTGTTATCC	CTCCCGAAAC CCCTCTGAGC AGGTGCAGTT	CCCTCTGAGC	AGGTGCAGTT	ATTATTCTCA	CTTCACAGAT
AAGGAAATTG	AAGGAAATTG AGGCACAGAG	AATTGAGTAA	CTTACCCAAG	GTGACATAGC	TCATATATGG

FIGURE 16 (53)

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CATATCCTGT	GCAGAG CATCCAGAGT GTTCCTATTA AAACCTAAAT CATATCCTGT	GTTCCTATTA	CATCCAGAGT	CTTA	AGGTATCAGT
GAAAGGAATA	TGAACC AACTTTGGAT TTTTATAGAG ATACTGTAAT GAAAGGAATA	TTTTATAGAG	AACTTTGGAT	TTACTGAACC	TTACTTAGCC TTAC
TTTGGATAAA	GTTTACTGGC	GCCATTAGTA	TCCCATCTCT	TGGGTTTGTA	AAAGATAACT
AGGACTTGAA	TGTCTTTCTT	TCTCTAAAGC	ATGCTAAGTT	AGCCTGGAAG TTATAGCAGG ATGCTAAGTT TCTCTAAAGC TGTCTTTCTT AGGACTTGAA	AGCCTGGAAG
CATCAGCATC	CCATCC AAAAAAAAA AGAGCTGAGG TGATGGCCAC CATCAGCATC	AGAGCTGAGG	AAAAAAAGA	GACTCCATCC	GACAGAGTGA GACT
CAGCCTGGGT	GTAGTGAGCC AAGATCATGC CACTGGACTC CAGCCTGGGT	AAGATCATGC	GTAGTGAGCC	GAACCCCAGA GGCGGATGTT	GAACCCCAGA
AGAATCGCTT	CTGAGGCAGG	CTTTGGGAGG	GTCCCAGCTA	TGTGGTGGTG TGCACCTGTA GTCCCAGCTA CTTTGGGAGG CTGAGGCAGG AGAATCGCTT	TGTGGTGGTG
ATTAGCTGGG	AAATACAAAA	TCTCTACTAA	TGAAGCCCTG	GACCAGCCTG GTCAACATGG TGAAGCCCTG TCTCTACTAA AAATACAAAA ATTAGCTGGG	GACCAGCCTG
AGGAGTTCGA	ACCAGAGGTC	CAGGTGGTTC	GAGACTGAGG	CTGTAATCCC AGCACTTCGG GAGACTGAGG CAGGTGGTTC ACCAGAGGTC AGGAGTTCGA	CTGTAATCCC
TGGCTCATGC	CTGGGCATGG	CTGAGGGGGG	ACAAAAAGAG	CCCAAAAAAA GGGGGCTGGC ACAAAAAAAGAG CTGAGGGGG CTGGGCATGG TGGCTCATGC	CCCAAAAAA
CTATGCTTTT	CTTGTAACTA	CGAACCTAAG	GTCTAGCTCC	TAAAGCAGGC TTTGAACTCA GTCTAGCTCC CGAACCTAAG CTTGTAACTA CTATGCTTTT	TAAAGCAGGC

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CATTGCTCTG CCCCAAACCA TTCAATGGCT TCCCAACTCA AAGTTAAAAA CTCATCTTTC	TGCTATCCGG TGTCTGACCT CATCTGTTGT TCCTTTCTCC	CTCCCTTTCT TGGCTCCAGA CGCACTCTGG TCTCCTTGCT GTTCCTTGAA TACACCAGGC	ACACTCTTTT CACCTGAAAC ACTTTACCCC AGATATCTTA GCTTACTCTC TGCCTCCCTC	AATTCATTGA TGAAATGTCT CAGTGAAGTC TTCTCTCTCT CCTCTGTAAA AGTATACTCT	TCTAGCTACT ATTGCTGTGT AACAAATCAC TCCCCAAATT	TAATGAGTGA AAACATCAGC CATCATCTTA TTTCTCACGG TTTCTGAGGG TCAGGAATTC	TATGCAGTGA GAGTCAGATG	CTGAAACAAA GCAGGGTTCT AGTAGCTGAG GGCTGGCTGG GTCTCTCAGA	TATAGTICAG ATCTCCTCCA GGGGGTCTCT CCACGTGGGC TAGTCTGAAC TTCCTCACAG	TCAGGGCAGT GGACTCTGCA TAGTGGCTGA AGGCTTCGCA GCTGAGTATT
TCCCAACTCA	TGTCTGACCI	TCTCCTTGCT	АСАТАТСТТА	TTCTCTCTCT	ATTGCTGTGT	TTTCTCACGG	TATAATCTCT	AGTAGCTGAG	CCACGTGGGC	TAGTGGCTGA
TTCAATGGCT	TGCTATCCGG	CGCACTCTGG	ACTTTACCCC	CAGTGAAGTC		CATCATCTTA	GTTCTGGCTC	GCAGGGTTCT	GGGGTCTCT	GGACTCTGCA
CCCCAAACCA	CAGTGGCCTG CAAGAGCCTA	TGGCTCCAGA	CACCTGAAAC	TGAAATGTCT	CTGTTCCCCT TCTTTACTGT	AAACATCAGC	CAGCTGGGAG GTTCTGGCTC	CTGAAACAAA	ATCTCCTCCA	TCAGGGCAGT
CATTGCTCTG	CAGTGGCCTG	CTCCCTTTCT	ACACTCTTTT	AATTCATTGA	CTGTTCCCCT	TAATGAGTGA	TGGAAGGGCT	CTGGCTAAAA	TATAGTTCAG	CATGGTGGCC

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FIGURE 16 (54)

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CCAGCAAGCA AAGTGGGAGC TGTATTGCCT CATATGACCC AACCTTGGAA TCCACAGGC	TTCTAC GGGTTGAAAA GTCACAAAAA CCAACCAGTT TCAAGGAGAA	CAATTGGAGA AGGGTCAAAG TCACATTGTA ATCAGAGCCT	ATTGCG GTCAGGTATG AAAAATTTGA TTTGCTGCAT CTGCTTTACT	TG ACTTACGTCA TTTCTGCATT	CTAAAA TGTCAGCCTG TTTTGTTCAC TGCTGTATCC CCAGAGCCTA	TG TTGCATGAAT GAATTCTGTC	TTCTAAGTTA AATATTACTA TAATCATCTT ACAGACGAGG	TC ACTCAGCCAC ATAATGGAAG	AGACAGCATT GAAGTACACA TGCTTGCTCT GTCTGCTCTT CCAAGCTGCT CATCACAGG	CTCCCCAGTC CACCTCCACC CTTACCCAGA GACACATG
CATATGAC	GTCACAAA	AGGGTCAA	AAAAATTT	CATGATAT	TTTTGTTC	TAAATACT	AATATTAC	ATGCGGGATC	GTCTGCTC	CACCTCCA
TGTATTGCCT	GGGTTGAAAA		GTCAGGTATG	CTGCTTCTCA CATGATATTG	TGTCAGCCTG	ATGTAG TGGTATCCAA TAAATACTTG	TTCTAAGTTA	TTGGTAACTT	TGCTTGCTCT	CTCCCCAGTC
AAGTGGGAGC	TGTATTCTAC	TCACATTTCT	AAGTATTGCG	CGTTCATGAT	CACACTAAAA	CAGC	AGCTATAGGT	TCAAGAAGAT	GAAGTACACA	GAGGACTTCC
CCAGCAAGCA	ATCACTTCCG TGTA	GGAACAGAGA	ATGGGATACG AAGT	TTCTCCACAG	TCCTGTCTTC CACA	GCACGGAGCC	TTTTAATCCT AGCT	GAAATGAGGC	AGACAGCATT	CTGCACCTCT
			SUBS	TITUTE	SHEET (Rule 26)				

SUBSTITUTE SHEET (Rule 26)

FIGURE 16 (55)

FIGURE 16 (56)

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CTTCTCCTTC	AAGGCCTTTG	CACATICTCT	GTAGTAGAGT	GTGACATTTA GTAG
CCAAGAAAAA	AAATGTACCT	AAATAATCTT		CCTAGAGAAA ATGA
TGTAATTAAA GTGAAGTCTT	TCAATATTTG	TGAAAAATAT	ATTTTATCT	ATTCTTTACT
GGCTAAAGAC	AGTGTTTGAA	TTCACATAAT	CGATGAGGAT	ACTGTTTCTC
CACTTATTTC CATATTTCTC	GGCCTGATTG	TTATTTATGA	TCACAGTTCC	CCATTAACAT
AGGTTTGTGG	GCCCTTTAAA	CTCTCCATTG	ATAATAAAGC	GATATTTGAA
TAGGGAACCC	CTATTTCCCT	ATATTTATCA	CATTTTACCA	TCTTTATAGG
GGCTTATTT TGCCTTGCTG	TCAAAGTTTT	AATGGCCAGC	GTAGCTTTTG	GAAAGGTTAG
TTACAAAAC ACAATTAAAT		TAGATCTTAT	ACTTGGCTTT	AACCCATCAC
TTTCAGAGCA TGTTCGGAAG	ACAGCAGATA	AAATCCCCTT	ATTGCACTTT	GAGCAAAGCA
GTTGGTTGCA	TTTTTCCCCA	CAAAATTCAA	ACTAGCAGAC	GCCACAATCC
	GTTGGTTGCA TTTCAGAGCA TTACAAAAAC GGCTTATTTT TAGGGAACCC AGGTTTGTGG AGGTTTTGTAG AGGTTTTATTT TGTAATTTAAA CCAAGAAAAA CCAAGAAAAA	TTTTTCCCCA GTTGGTTGCA ACAGCAGATA TTTCAGAGCA TTCTGGTTTT GGCTTATTTT CTAAAGTTTT GGCTTTATTTT CTATTTCCCT TAGGGAACCC GCCCTTTAAA AGGTTTGTGG GCCCTTTAAA GGCTTATTTC AGTGTTTGAA GGCTAAAGAC TCAATATTTG TGTAATTAAA AAATGTACCT CCAAGAAAAA AAAGGCCTTTG CTTCTCCTTC	CAAAATTCAA TTTTTCCCCA GTTGGTTGCA AAATCCCCTT ACAGCAGATA TTTCAGAGCA TAGATCTTAT TTCTGGTTTT GGCTTATTTT AATGGCCAGC TCAAAGTTTT GGCTTATTTT ATATTTATCA CTATTTCCCT TAGGGAACCC CTCTCCATTG GCCCTTTAAA AGGTTTGTGG TTATTTATGA GGCCTGATTG CACTTATTTC TTCACATAAT AGTGTTTGAA GGCTAAAGAC TGAAAAATAT TCAATATTTG TGTAATTAAA AAATAATCTT AAATGTACCT CCAAGAAAAA CACATTCTCT AAGGCCTTTG CTTCTCCTTC	GCAGAC CAAAATTCAA TTTTTCCCCA GCACTTT AAATCCCCTT ACAGCAGATA GGCTTT TAGATCTTAT TTCTGGTTTT TTACCA ATATTTATCA CTATTTCCCT TAAAGC CTCTCCATTG GCCCTTTAAA TAAAGC CTCTCCATTG GCCCTTTAAA TAATCT TGAAAAATAT TCAATATTTG TAATCT TGAAAAATAT TCAATATTTG TAACTC AAATAATCTT AAATGTACCT TAGAGT CACATTCTCT AAGGCCTTTG

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TTATGGCCTT	TTTTTCT	CCTTGACCTG	TTTTAAA	AGATTAC	TTTTAATTG	TTACCCA	CTATAAT	AACTGGA	CAAGGGG	ACCAGCC
	GAT		GG1	CAA	m TTT	ACC	GTA	GGA	CTG	AAC
TTTAAAATTA	TTTTGCTCCA GATTTTTTCT	CTTAAAACAA AACCTAAAAA CAAAAATCTT	TTGCACTAAA GGTTTTTAAA	ACTTATATGG	TCAAGTTCTC	CTCACTTGGC ACCTTACCCA	TCAGAGCAGC TACACAGTTG GTACTATAAT	TTGTACACAG GGCTTGCTGG GATATTGATG GAGAGAAGGA GGAAACTGGA	GGTCTCAGGT	GACCTTGACC
TCAAATCACT	TTTATCTTTC	AACCTAAAAA	ATCTTTCCCT	TCATCTGCTA	GGCCAATCTA CAGAAAGTTT	CATCTTGCTT	TCAGAGCAGC	GATATTGATG	CCCATCTCCA	ACTTGTGCTG
ATGGCTGACT	GGTGAGGGGC	CTTAAAACAA	TCCTATTTT	CTCCATTTTC	GGCCAATCTA	CCACCTTTGA	TAGGATGTCT	GGCTTGCTGG	GGGAAATTGA	GAGTCTAGAA
TCATCTTTGA AGGTTATGTC ATGGCTGACT	GAGTTCTGAA GGTGAGGGGC	TACCAAGCAT	GTTTTCCCA CTAGCTAACA TCCTATTTT	CGGATCTTTA TACCCTCTGT CTCCATTTTC TCATCTGCTA ACTTATATGG CAAAGATTAC	CAACATAATT	GCCTACCTCC CCACCTTTGA CATCTTGCTT	TTCCCTCCTT	TTGTACACAG	AGTAGTTCAG GCCAGAGCTA GGGAAATTGA CCCATCTCCA GGTCTCAGGT CTGCAAGGGG	TTAACACATG GAGTCTAGAA ACTTGTGCTG GACCTTGACC AACACCAGCC
TCATCTTTGA	CTTTAAATGT	ACCGCGTCAT	GTTTTTCCCA	CGGATCTTTA	CACTGCCTTT	ACCACCTCCT	GTGTTCAAGA	TTATACATCC	AGTAGTTCAG	AGCTCACAGC
			SUB	STITUTE	SHEET	(Rule 26)				

FIGURE 16 (57)

FIGURE 16 (58)

ATGGAGAGAA TTTGATTGGA AACCTTACCA ACCTACACAA AGCATCTCTT GGCAGAATGT	CATAGTGGCT TTGACATGGA ATAAATAAAA GAATTTCTTTA ACACCCTTTC ACACCCTTTC	CAATAGTGTT CATAGTGGCT TTTCAAGGAT TTGACATGGA ACAGGAATAC ATAAATAAAA GAAAACCTGG GAATTCTTTAA GTTTTTTGT ACATTTCTTT TTTAAACCTC ACACCCTTTC GTCCTGAATG AAACAAAAAT AGTATTCAGA GGTAGAAGGA	CAGGTAAGTG CAAAATACA TACAATTCTG CAATAGTGTT CGCTCACTAA CTTTGTTTAA ACAGTTGTTC TTTCAAGGAT AAAGCATGAT ACCATTTTTT GCAATTAAAC ACAGGAATAC TTTTTTACAA ATAGCTACTA AGAGCTACTA GAAAACCTGG TGCTACTTGC TCTAAAATAT TTTATTTTTAT GTTATTTTTGT ACACCACTGT TTTCTTCATT TCTTAGTCTA TTTAAACCTC AAATTATTTAC TACCATCTGT TAGTTCTCCT GTCCTGAATG	CAGGTAAGTG CAAAATACA CGCTCACTAA CTTTGTTTTAA AAAGCATGAT ACCATTTTTT TGCTACTTGC TCTAAAATAT ACACCACTGT TTTCTTCATT AAAACGAGGG CGAACAGATT
ACCTACACAA	ACATTTCTTT	GTTATTTTGT	TTTATTTTAT	TCTAAAATAT
AACCTTACCA	GAATTCTTAA	GAAAACCTGG	AGAGCTACTA	ATAGCTACTA
TGCATCAGTA	ATAAATAAAA	ACAGGAATAC		ACCATTTTT
TTTGATTGGA	TTGACATGGA	TTTCAAGGAT	ACAGTTGTTC	CTTTGTTTAA
ATGGAGAGAA		CAATAGTGTT	TACAATTCTG	CAAAAATACA
GAAAGGTAAA	TAAGACATTG TAGCTTTCCT TAAGTTGCTC ACTGAGTAAA TAGAGAGACA GAAAGGTAAA	ACTGAGTAAA	TAAGTTGCTC	TAGCTTTCCT
ACCACAAAGA	AGGCACAGGG ACCACAAAGA	GCATTGTGTT	TACGTGTTGG	AGAACTTACC AAGTGTCAGC
TTATTCAAAG	CATGGAGTCC AATACAGTGC TCAATAGGGA TTTCCAGGAA ATTGCTATAT TTATTCAAAG	TTTCCAGGAA	TCAATAGGGA	AATACAGTGC

FIGURE 16 (59)

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GACACATTTA	CTATTAAGTA	AAAACTGTAC	TTTATTTTT	CAGCTCACTG	TAGCTGGGAT	PGGGGTTTCA	PTGGCCTCCC	ATTATTTGAA	STCAAATCCC	PCTTTCTGCA
ACAACTTATA	AAAAGTTTAA GATCTCAAGA GCTATGTCTG AATAGATAGA AGTAAAAACT CTATTAAGTA	GCATGTAATC AAAACTGTAC	ТАТТТАТТТТ		CAAGCGATTC TGCTGCCTCA GCCTCCTGAG TAGCTGGGAT	TTAGTAGAGA TGGGGTTTCA	TTGAACTCCT GACCTCATGA TCCACCAGCC TTGGCCTCCC		ATTTGACAGA CTTTGATGGA GTCAAATCCC	AATGCTGCCA CTTACTGAAC GGCCTTAAAT GACTTAGTCT CTCTCAGCTG TCTTTCTGCA
ACACATATGA TAAACGAAAA CAATAATAAC TTTATACATA ACAACTTATA	AATAGATAGA		TTATTTTTT	CACCCAGGCT AGAGTACAGT GGCGTGATCT	TGCTGCCTCA	TTCTGTATTT	GACCTCATGA	AAAGTGCTGG GATTACAGGC GTGAGCCACC ACGCCTGGTC GAATGTTTTT	ATTTGACAGA	GACTTAGTCT
CAATAATAAC	GCTATGTCTG	AGTGAATTTC	TTGAATGTTT	CACCCAGGCT	CAAGCGATTC	ACTGCA CCCGGCTAAT	TTGAACTCCT	GTGAGCCACC	CTTAAA TCTGTCTTCT	GGCCTTAAAT
TAAACGAAAA	GATCTCAAGA	ATTAGGAAAA TAACAAGAAC AGTGAATTTC TTAATGAATG	ATTCATAATC	CTTGCTCTGT	CTCCCAGGTT	TGCCACTGCA	CAGGCTGGTC	GATTACAGGC	GGGCCTTAAA	CTTACTGAAC
ACACATATGA	AAAAGTTTAA	ATTAGGAAAA	TTATCGTCTA ATTC	GAGACAGAGT CTTG	CAACCTCCAC CTCC	TACAGAGGCC TGCC	CCATCTTGGC CAGG	AAAGTGCTGG	GAGACAACAT GGGC	AATGCTGCCA
			CITO	CTITI FFG	CHICET	(D1- 26)				

FIGURE 16 (60)

	TTTGAAATGG GCCAGGCGCA GTAGCTCCTG CCTGTAATCC CAACACTTTG GGAGGCCAAG GTGGGCGGAT CACCTGAGGT CAGGAGTTTA AGACCAGCCT GGCCAACATG GTGAAACCCT GTCTCTACTA AAAACGCAAA AATTAGCCAG GTGTGGTGGC ATGCACCTGT AGTCCCAACT ACTCAGGAGG TTGAGGGAGG AGAATTGCTT GAACCTAGGA GCTGGAGGTT GCAGTGACCC
AACTATTI	G TTGAGGGA

FIGURE 16 (61)

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CAAGCCTAAT	AAGTCATGAA	AATTATTCTA	AATTTTTAAA	TATTTTAGTT GGAATTTAGA AATTTTTAAA AATTATTCTA AAGTCATGAA CAAGCCTAAT	TATTTTAGTT
CCAAGCTGAT	GTCAGAAGAG	TTCTTTCTAC	AATCTCCCAC	TGAGAAACTA ACGTTCTTGA AATCTCCCAC TTCTTTCTAC GTCAGAAGAG CCAAGCTGAT	TGAGAAACTA
GTCAAGAGGG	TAAAGCACAA GTCAAGAGGG	CCAGGTGTTA	CTAACTGAAG	ACAATCTCAC AGAGCCCTAA CTAACTGAAG CCAGGTGTTA	ACAATCTCAC
AGGAAGATGA	CTACTATGCC TAGGCTGAAG AAAATGGCTC AGGAAGATGA	TAGGCTGAAG	CTACTATGCC	TCCACGCAGG ACTTGCACTT	TCCACGCAGG
TTCATTAATC	AACACAGGTC	AAGGCGTGGT	AGATGCTTTG	GCATGACTTA GAGAGCAGGC AGATGCTTTG AAGGCGTGGT AACACAGGTC	GCATGACTTA
ATTAGCCAGT	TTCCGCTCTA	ACCCATTTTG	AAGGAAAGGC	GTTTTTAATT TTCAACCGGA AAGGAAAGGC ACCCATTTTG	GTTTTAATT
CAGTTTCTTG	GAAAGAGAAA	CACATCAAAA	GGTGTCAGGT	AGATGCTTCA TATGCACAGT GGTGTCAGGT CACATCAAAA GAAAGAGAAA CAGTTTCTTG	AGATGCTTCA
TCAATACAGA	ATCCTTCATT	TATTTTCTTT	AGCACCTTGG	GAGGAGACAT GAATTCAGTT	GAGGAGACAT
TCTGGGAGAG	TTTTCTGGCT TCTGGGAGAG	TTTGTTCTGT	CTGAAACTGC	GGTTATTTAG ATTCTAAGAA CTGAAACTGC TTTGTTCTGT	GGTTATTTAG
TTTGAGAAGG GGCCCATTTG		AGGATTTTCA	ATGTTTTCAA	CTGATTGGCA ACAGTTGCAG ATGTTTTCAA AGGATTTTCA	CTGATTGGCA
AAAATCAGAT	GACTTTACAC	ACAATACACT	TTTGTACCAA	AATTGTCTCC CTAGAAACGG TTTGTACCAA ACAATACACT GACTTTACAC AAAATCAGAT	AATTGTCTCC

GAGGAAGCCA GAATGGAATC CTGTAGAATG TTCACTCTAC CAACGAACTC TTGTTTTTTT AATGAGGAAA CAGAGGCCCA CAGTAGTAAA CTATCTTAAC CAAGACAAAA TGACTAGTGC TCTGGTCCTT TTATTAAGCA CTAAAATTTT GATCCAATAA TAAATCTGTC CAGTAGAAGG	ATGTACTGGT TCTAACTTGT TCCCTTCAAG GGGCCAGTGT GGACTTCTCT TCAACTACCA TTACCCAGAG GGCAGAACCT	CTGCTGTTCA CATCTCAGCA GCAGTGTTGC ATTTGAGCTT TATATCTGCT CAGATGTTTA ACTCATCTAA TTCAGTGAAC	GAGGAAGCCA GAAAATGAGGAAA CAAATGAGGACTT TTTTTCCCTTA ATGAATTGACATT CTGAATTGACATT CTGAGACC TAGAGATTCCA ACTTCAAGGGCTT CCTTCAAGGGCTT CCTTCCAGGGCTT CCTTCCTAGAGTT CCTTCTAGAGTT CCTTTAGAGTT CCTTCTAGAGTT CCTTCTAGAGTT CCTTCTAGAGTT CCTTCTAGAGTT CCTTAGAGTT CCTTCTAGAGTT CCTTCTAGAGTT CCTTCTAGAGTT CCTTCTAGAGTT CCTTAGAGTT CCTTCTAGAGTT CCTTCTAGAGTT CCTTAGAGTT CCTTAGAGT	ATGGAATC GAGGCCCA ATTAAGCA GTACTGGT ACTTCTCT TATCTGCT TATCTGCT TATCTGCT TATCTGCT	CAGAGGCCA CAGTAGAATG TTCACTCTAAC CAACGAACTC TTGTTTTTCT CAGAGGCCCA CAGTAGTAAA CTATCTTAAC CAAGACAAAA TGACTAGTGC TTATTAAGCA CTAAAATTTT GATCCAATAA TAAATCTGTC CAGTAGAAGG ATGTACTGGT TCTAACTTGT TCCCTTCAAG GGGCCAGTGT CCGTACACA GGACTTCTCT TCAACTACCA TTACCCAGAG GGCAGAACCT AAAATGCTGT CTGCTGTTCA CATCTCAGCA GCAGTGTTGC ATTTGAGCTT CTGCAGGGCC TATATCTGCT CAGATGTTTA ACTCATCTAA TTCAGTGAAC ACTTCATTCT ACATCTACTT TGTACAAGGC ACTACAGCGG TTCAGAGATG AATAAAATCA CTGTCTCCTA TAAACCATCA CTTTGGGAAA TTTTAGAAAT GTGGGTAAGC CCTGCAGCGT AGAAGTCACA AACTCAAATG CCTGCAGAGG CCCAGCTGAC	TTCACTCTAC CTATCTTAAC GATCCAATAA TCCCTTCAAG GCAGTGTTGC ACTCATCTAA ACTCATCTAA ACTCATCTAA	CAACGAACTC CAAGACAAAA TAAATCTGTC GGCCAGAACCT ATTTGAGCTT TTCAGTGAAC TTCAGTGAAC TTCAGTGAAC TTCAGAGATG TTCAGAGAAAT CCTGCAGAGG	TTGTTTTTCT TGACTAGTGC CAGTAGAAGG CCCGTACACA AAAATGCTGT AAAAATGCTGT ACTTCATTCT ACTTCATTCT ACTTCATTCT CCCGGGGCC CCCCAGCTGACC
AGTTTCCCTA ATGTACTGGT TCTAACTTGT TCCCTTCAAG GGGCCAGTGT CCCGTACACA TAGCTAAATG GGACTTCTCT TCAACTACCA TTACCCAGAG GGCAGAACCT AAAATGCTGT GAATGACATT CTGCTGTTCA CATCTCAGCA GCAGTGTTGC ATTTGAGCTT CTGCAGGGCC ACCCAGGACC TATATCTGCT CAGATGTTTA ACTCATCTAA TTCAGTGAAC ACTTCATTCT	GAATGACATT CTGCTGTTCA CATCTCAGCA GCAGTGTTGC ATTTGAGCTT CTGCAGGGCC ACCCAGGACC TATATCTGCT CAGATGTTTA ACTCATCTAA TTCAGTGAAC ACTTCATTCT		AGTTAACTGA ACI TGAGATTCCA CTC	ATCTACTT 3TCTCCTA	TGTACAAGGC TAAACCATCA	ACTACAGCGG CTTTGGGAAA	TTCAGAGATG	AATAAAATCA GTGGGTAAGC
ATGTACTGGT GGACTTCTCT CTGCTGTTCA TATATCTGCT ACATCTACTT	GAATGACATT CTGCTGTTCA CATCTCAGCA GCAGTGTTGC ATTTGAGCTT CTGCAGGGCC ACCCAGGACC TATATCTGCT CAGATGTTTA ACTCATCTAA TTCAGTGAAC ACTTCATTCT AGTTAACTGA ACATCTACTT TGTACAAGGC ACTACAGCGG TTCAGAGATG AATAAAATCA FGAGATTCCA CTGTCTCCTA TAAACCATCA CTTTGGGAAA TTTTAGAAAT GTGGGTAAGC	AGTTAACTGA ACATCTACTT TGTACAAGGC ACTACAGCGG TTCAGAGATG AATAAAATCA		rgcagcgt	AGAAGTCACA	AACTCAAATG	CCTGCAGAGG	CCCAGCTGAC

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FIGURE 16 (62)

FIGURE 16 (63)

GTGTGGTGTT	TTTAGTGAAC ACTTCAAGGC TGAGATACGC TAGGAGAGTC GTGTGGTGTT	TGAGATACGC	ACTTCAAGGC	TTTAGTGAAC	CGATATCAAT
CAGGGAAGAG	TTGCTTCTTT	TGTTTACGAC	AACAAGACAA	TTTAATTTTA AACAAGACAA TGTTTACGAC	ACTGTAGATT
TAAGCACTTC	CCTCTTGCGG	GAGACACATT	AGACAACCTT	CGGAATGTCA AGCGCATTAG AGACAACCTT GAGACACATT CCTCTTGCGG TAAGCACTTC	CGGAATGTCA
TAAAGGAACA	TGGGTTCAAT GAACATTCGG TAAAGGAACA	TGGGTTCAAT	GACCCCAGCC	TTCTTCCCTC AGCCTCGTCC GACCCCAGCC	TTCTTCCCTC
TCAGGCTGGC	TCTTCTTCCC	CTTTAACCTT	TCCTGTCTCT	CCTTCCTCCT TCCTGTCTCT CTTTAACCTT TCTTCTTCCC TCAGGCTGGC	TTATTTTATG
CTTTTTTATT	CATAATAATT	CAGTGTCCTA	GGGTAGCATG	ATGTGCAGAG CAGTCGTAGA GGGTAGCATG CAGTGTCCTA CATAATAATT	ATGTGCAGAG
TACTTAGCCC	TGCAGTCTCT	CAGATCAGTT	CAAAGGTTCT	TCCAAGAGGA TTATATGGGG CAAAGGTTCT CAGATCAGTT TGCAGTCTCT TACTTAGCCC	TCCAAGAGGA
CTCTCAAATT	AGTGTAAAAT	TCTCAATGTT	AAGCCGGAGA	TTCTCAGAAA AAGCCGGAGA TCTCAATGTT AGTGTAAAAT	TACCGAAGAT
GTGTAGCCAG	TCCAGCC AACTGTGTTC CCATGTAGAA CTGCGGCCCA GTGTAGCCAG	CCATGTAGAA	AACTGTGTTC	ATTTCCAGCC	GCTGCTACTC ATT
			CTGTGTT AAAGGACA	CGCCTGTGTT	GGGGAGTGCA CGC
GTTTCCAGCT	GATTCTG GCTGGGCGGA AAACAATTAC GGGTGGGTGG GTTTCCAGCT	AAACAATTAC	GCTGGGCGGA	AATGATTCTG	AACATAAGTA AAT

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GCACAGCAAA GAATTCCACT TTGAAGCGAG TGGGAAAAAA AGCATCAAAT GCCACATGTA ACCGAATAGA CTGTACAGGC GATTAGAAGT TGATGAGAGA TGAGATAGAG GAAGAGGACA TGGGGGTTAC CCGTAAGTGG GAGGAGAACT AGGAAGGTAA ATGAAATCAA AATGTATCTG AGAGTAGAAA AGTAGAATCA GCTGGCCATC AAAGGGCGTG GGACTGAGGA ACAGTATGGC GTTCTCCTGG GGGGTGAGGG CTGTGGTGCA AATACTCCCA CCATGACCAG GTTATGATAG AAATACATGT TTTGAGAGAT TTAAAAAGGG CCTGTTTAAA ACATTGCCTA GTACAACCTC TCTCTCTCTC AAACCTGGGT GTGGGAGCTT AGGGATTAGG TTAACAGTTG TGGAGTCTAT TTAGGTGTGC CATTGGTATG AATATTAGCA GCTGACATTG TGGAAAATGG TTGCCTATTT TGAAGGGTTA CTAGCCATTA AAAGACCTGC ATGAACAGAG GAAGGGTCAG GAGGAAAGAG GAAGCCCTGA TTTGTAATAT TATACTAAGC TGGAGAATAG AGTATTGTCC GACAATAAAC ACTCACCGCC TGGGTAGTAG ACCAGGAGCT ATGTATTAAA TAGGGGATGA GAATACATGC

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FIGURE 16 (64)

FIGURE 16 (65)

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CATTTGTTCC	TCAAGATTTC	GGTAGCTGAA	AGAAAGGCAA	TAGAGGAAAG	TGCTCAAGGT	CACCAATTAT	AAGACATTTC	CATGTGCCTG	GATAGATCCC	CATTCCCTTT
GAGATGCGCA	CAAAGAAAAC	GCTGTGCTGA	AACAGAAATT	AGGGTGACAA	TGTGACATTG	CATCATTTAT	GATGTGTAAG	TGTAGAGTGC	ТААТАТТААТ	GTTTTACCTG
AGGTTGGGAG	TCAACAAGGT	TCTAGGAATG	CATGAAGCTG AAGAGGTGAA AACAGAAATT AGAAAGGCAA	CCAGTTTCTG	TAGAAGCGAG	TGTCACATGC TGTTGTGAAC CATCATTTAT	CTTGCCATAT GCATTATAAA GATGTGTAAG AAGACATTTC		ATGAGGCTCT	CAATGTGCCT AGCATTAAGT GTTTTACCTG CATTCCCTTT
TCACAAAAGC	GAAGGTGAAA	GGCAATGAAG		ACCCCTGCAG	CCAGAAGCCA	TGTCACATGC	CTTGCCATAT	TTAGGGCTGT ACACAGATAC	AGGTTAAAAG	CAATGTGCCT
TTTCAAGCTA TGAATGTGAA TCACAAAAGC AGGTTGGGAG GAGATGCGCA CATTTGTTCC	CCGGCAAGGT GGAAGGTAAA GAAGGTGAAA TCAACAAGGT CAAAGAAAAC TCAAGATTTC	GAGGTGCCTC AGGTCTGAGG GGCAATGAAG TCTAGGAATG GCTGTGCTGA GGTAGCTGAA	ATAGAAGTGA CTGCAGAGGT	ACCCCCACCG CCCAACCCCC ACCCCTGCAG CCAGTTTCTG AGGGTGACAA TAGAGGAAAG	GGTGGAGATG GAGTTCAGGT CCAGAAGCCA TAGAAGCGAG TGTGACATTG TGCTCAAGGT	CAGCACATGT CAGTGTGGGG	CTATGGGCAT	GGAGAA	GTACAGATAA GGTGTGTTAG AGGTTAAAAG ATGAGGCTCT TAATATTAAT GATAGATCCC	GTCTGACTTA
TTTCAAGCTA	CCGGCAAGGT	GAGGTGCCTC	ATAGAAGTGA	ACCCCCACCG	GGTGGAGATG	CAGCACATGT	GGAAGACCTC CTAT	CCTCCACTTG GTGA	GTACAGATAA	ACTTACCTGA GTCTGACTTA

FIGURE 16 (66)

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ATGATACACA	CAAAGT GAGGAAAACG TTAAAACTGC TAAAGCAAAA ATGATACACA	TTAAAACTGC	GAGGAAAACG		AGATGATAAA ACCA
GGCATTTCTG	GCAGCG AACAAATCA CTTGCTGTGC CAAGCCAACT GGCATTTCTG	CTTGCTGTGC	AACAAAATCA	TCCAGCAGCG	ATGACCCACT TCCA
AGCATTTTAA	GTATTGTTAA	CTAGTTAAAG	AGATGAATGA	ATTATTCTAT GTACATCCCC AGATGAATGA CTAGTTAAAG GTATTGTTAA AGCATTTTAA	ATTATTCTAT
TTCTCGATTT	AAGAGATGTG	AACAAGCACA	CAGGTCTTGG	CTGTAAAATC TCTGCCATCT CAGGTCTTGG AACAAGCACA AAGAGATGTG TTCTCGATTT	CTGTAAAATC
GCAGCAGAGA	GGGGGCTGC	CCAGAATGCA	GCTGTTGAAG	AGTGGGAAAA GTTTTGCAGA GCTGTTGAAG CCAGAATGCA GGGGGGCTGC GCAGCAGAGA	AGTGGGAAAA
TGAGTGGGAG	TTTGTGTGAT	CAAGTGTATT	TTTTTAGGAT CTGCTGTTAG CAAGTGTATT		GTGACATGTA
GTGCTTGCAT	AATTTCCCTT	GTTTAAAAAA	GTCAATTCAT	AGCTTGCATA TTCCTAAAGA GTCAATTCAT GTTTAAAAA AATTTCCCTT GTGCTTGCAT	AGCTTGCATA
CCTTTTTTA AAAAAATTC	CCTTTTTTA	GTAATAGGAG ATTCGGTGTT		TGATGGAAAT GAAGGATAGT	TGATGGAAAT
GATAATACTC	TCCCCCAGAA	CTATTTCCC	AATCACTGTG	ACCAAACAGC TTGTCTCCCC AATCACTGTG CTATTTTCCC TCCCCCAGAA GATAATACTC	ACCAAACAGC
TCCTTCTAAC	GGAACTGAGG	AGCTGAGCCA	CAAGTGCCAG	ATCCAAGGTC ACACAATTGG CAAGTGCCAG AGCTGAGCCA GGAACTGAGG	ATCCAAGGTC
TCAGTAACTT	TTACAGATAG GGAAATTGGG TCAGAAAGTT TCAGTAACTT	GGAAATTGGG		GACCTTCAGA ACAACCCATT	GACCTTCAGA

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ATAATGGAGA AGGAGAAAAA TTGAGCTTTA TTGTCTGCCT AGGCAGATGG CTGACCACTA CGAGGAAGAT CATTTTCTGC CAGAAGGTTA AAAAGTAACT AAGGACCGGA CCAGATATAA AATTGCCTGC TTTGATAATT ATACCCTCTA AATGAGGGGC AAGTGGCTAA TTATGCCCCAC ATGTGGCCGA TIGCACTCCC CATTAGCCAA TTATGTGCTC AATTATTTGT GCACATGAAT AATTGCACTC GGAGTAATTG GTGGGGAGGG AAAGAGTATC AGATACCAGG AAACGCATAA TTCACTGCCA CAAATGGCCT TAGGAGCCAG AGAGAGCGGG TGATGGTTGA TCCAAACGGG CAATTGAAAT TITCAAAICC ICGIGCIIGG AGIGGCIGAI GTGTTTCTGG TCACGCTTCA GCTCGGTCCA CAAGATCCTG GCTCATTCTT TCCTAGATTC GGTTGCTGGG TCTGGAAATA AAAGGACATG CCTGCATGCG CAATTTATCC CAGGGTAATT TGACTGGGTC GTCTTTCTCT GCGTCACGTC AAAATGCTTT GCGCCCTCC CTCGCAGATG TCACACTGGA AATGCACTTG GGTGGGCTCG CTCCTCTCCA CCTTTACCTT TTTCCTAGCC ATGGAAAATA GTGACCAGAG

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FIGURE 16 (67)

FIGURE 16 (68)

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AGTCTTATAA	GATGGCAATG	AGGTACATTC	TTTGATTGCC	TCTGGCATGC ATTTTCACGG TTTGATTGCC AGGTACATTC GATGGCAATG AGTCTTATAA	TCTGGCATGC
GTCTAGGAAA	ТТТАТСТСАА	AGTGGGAAAT	ATTTGCAAAT	TTTTACTCTG ACCTGTGCTG ATTTGCAAAT AGTGGGAAAT TTTATCTCAA GTCTAGGAAA	TTTTACTCTG
GTTTTGGGCC	CCGGGCCCCT	GCACATTGGC	GAGGTCACTG	AAGACTCAGT CCTGCCTTAG GAGGTCACTG GCACATTGGC CCGGGCCCCT GTTTTGGGCC	AAGACTCAGT
AAAATGATGA	CACTGTCCTG AGAATTTGGA AAAATGATGA	CACTGTCCTG	CATCTG TCAATTGTTA	CAAACATCTG	ATTCATTCAA CAAA
GAATTCATTT	TGGTCATACA	AAATGTCATG	AGGTACCAGA	CAGCACTGAT GTTTCTACTG AGGTACCAGA AAATGTCATG TGGTCATACA GAATTCATTT	CAGCACTGAT
CTTGTTGCCC		AGTTTGAGAA	AGGGAGGGAA	ATGCAGGACT CCTGGTTTGG AGGGAGGGAA AGTTTGAGAA GGACAGGAAG	ATGCAGGACT
CTCCACAGCA	GGTAATGACC	ATGAAGGAAG	ATCTCCAATT	ATTATCATGT CGCTTGGTAC ATCTCCAATT ATGAAGGAAG GGTAATGACC CTCCACAGCA	ATTATCATGT
AATATGAGGC	TTGGGTAAAA GCTTTACATA AATATGAGGC	TTGGGTAAAA	TACAATCTGC	TAAAAGGATT	TCAGACTATT
GTGGGATGGA	CATCACTATC	GCCCAATTCC	TGGTAATAAC	TTCTGCATAC ACAATGAGGA TGGTAATAAC GCCCAATTCC CATCACTATC GTGGGATGGA	TTCTGCATAC
GTCTAACTGG	GCGGTG ACCTTGGGCA AGTCATTAAC TTTCCTTCAG GTCTAACTGG	AGTCATTAAC	ACCTTGGGCA	ATGTGCGGTG	TGGGCAGCTC ATGT
TGAAGTTGCC	AGCCTGCTTC	TGAGTTAGGA	GGCCAGCCTG	AAGGACCACA GGATGGAACG GGCCAGCCTG TGAGTTAGGA AGCCTGCTTC TGAAGTTGCC	AAGGACCACA

FIGURE 16 (69)

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CAGGCTGGAG TGCAGTGGCA TGATCTCCGG TATTTTAGT GGAGACAGAG TGGTATATGT CACAGTGTCG GGTGGGGCTA AGAGGCACAT CAGCAGCTCC CTGCCTGGCC TGTTTGGTTA CCTTCATTTA CCTAAAACT GTGGTTGTTG CTGTGGTTGT TGTTTTTGTT GCCTCAGCCC CCTCAGTAGC TCTGGTGATC CGCCTGCCTC TTACAGGCGT GAGCCACTGT GCCCAGCCAG AACTGTGGTT TCTCCCCTCT CACACGTAGT AAGAAAGAGA CTCTACCTCC ATGGAAGTTA AGGAGAGGTT TCACAGAGGC AGGATTGCTT CATITICCCAC CATICICGCC IGGATIAGCG TCTCTGTGAC CAGGTTCAAG CGATTCTCAT CTGGTCTCGA ACTCCTGATC CTAATTTTTG TCAAAGACAT TATGTCTCCA CTCTGTCATC CCATGCCCGG GCCACTTCCC ACCTTCTTCC TGGATTACAG GCGCGCACCA GGCCTCCCAA AGTGCTGTGA TTTGGCCAGG CTCTAGCTTT CGGAGTCTTG CTCCACCTCC TGCTAAAAAG TGCTGCAGTG ATCCATCATT CCTCACTTTG GTTTTTGAGA TTTCACCATG TCACTGCAAA CAGAGAGGCA TTAATGACAA CTTATTACCT

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AAGAACCATC TTTGAGAAAT	ACIGGG ICAGGAIAGA GUUCAGGAAI UITIAUUTIN AAGAAUUAIU ATATGA TUUTTATGCA GGTGATUTGG GGGUUGACA TTTGAGAAAT	GCCCAGGAAT	TCGGTTAGG	ALTCACTGGG CCTCATATGA	CCACCTCCCA CCTC	
>1>>1>>1>			1 1111 1 211			
AACTTCAGAA	CTGGAG AGGAGACAGC TATGGCTGGA GTGATTCTCA AACTTCAGAA	TATGGCTGGA	AGGAGACAGC		GTGCCTGTGG CCCA	
GGGGTCAGTG	TGTGTGCTGG GGGGTCAGTG	CCCTTGTGTT	TAGTGC AGAAAGATTC	CTGCTAGTGC	AGCCTTTAAG CTGC	
ATCCAAGAAA	TTTTTA TTACTTGACT AAAAATATAC CAAAAAGACC ATCCAAGAAA	AAAAATATAC	TTACTTGACT		CTTGTTTGCC ATTA	G1 11C1C00 (
AGAGTAAACA	TTTTGGATGA TGACTAGCAC AGAGTAAACA		AAATAGAAGT	ATAAGAGTCA GTAAATATAA AAATAGAAGT	ATAAGAGTCA	
TAAGGTTATT	ACCTACCTTA	АТТАТААТАА	TAAAATGGGG	TGCTTTTATT CACTCTTCTA TAAAATGGGG ATTATAATAA ACCTACCTTA TAAGGTTATT	TGCTTTTATT	ar ma
AACCTCTCTG	TGATGTTGGG CCAGTGACTT AACCTCTCTG	TGATGTTGGG	TTGAAT CCTGGCTGTG	GGAATTGAAT	GACTCAGCCT GGAA	
TCTGAAACCA	GAGTGTGGAC	TGCAGGTTAA	AATAGCCTGG	TACAGGAAAT TGAGGTATGT AATAGCCTGG TGCAGGTTAA GAGTGTGGAC TCTGAAACCA	TACAGGAAAT	
GGGCCACAT	CAAAGGGATT	ATGAATGAGA	TATTTGCTAA	ATTAGTCTTC AAAGATGAGG TATTTGCTAA ATGAATGAGA CAAAGGGATT	ATTAGTCTTC	

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FIGURE 16 (70)

FIGURE 16 (71)

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IT TTAAAAAATT TAATAAAAAT GCCTTAAAAA TTAACATTAT TATAAGATGA	GAGAACAATT
AA TTGTGGGGCA CACTTAGCAG CTTCCTTCTC TAATTTTTCT GTATTTTTCAG	AGATGTGGAA TTGTG
TC TGACTTGCTG CAACAGTCTG CTTTGAAGCA GGGCTGTGTT TACACTGGTC	GTGAGAATTC TGACT
TG CCGTGCCTGG CCTGCTGTTT CTTTTAGTTG GGCCTCTTCT GTAATAGAGT	GTGTGAGCTG CCGTG
AT CAGGTAATCT GCCTGCCTCG GCCTCTCAAA ATTAGTAGCT GCAATTACAC	CTCCTGACAT CAGGT
IG TATTTTTAGT AGTGACAGCG TTTCACCATG TTAGCTAGAC TGGTCTCGAA	CTAATTCTTG
GATTCTCTTG CCTCAGCCTC CCGAGTAGCT GGGATTACAG TCATGCACCA CCACGCCCAA	GATTCTCTTG
AGGCTGGAGG GCAGTGGCAC AATCTGAGCT CACTGCAGCC TCAGGCTCCT GGGTTCAATC	AGGCTGGAGG
TCATTCACTC ATTTATTTAT TTATTTT ATTTTGAAAC AGAGTCTCAC TTTGTCACC	TCATTCACTC
AGAGAAGAAG ACAATGCTAA GATTTTTGTT GGAGATCTTT TGCTGGGATT GCTGCTTCAT	AGAGAAGAAG
GT CAAAGTGGGC TCTAACTGCA TCTCATTTCT TACCTGGCAT ATCTAATAGT	AGACTCAGGT

FIGURE 16 (72)

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FIGURE 16 (73)

TCTCCTTGTG	TGAGATGGTA	CTGACTGGTA	AATAGCCATT	TITITAAAAA ACTITITAAT AATAGCCATT CTGACTGGTA TGAGATGGTA TCTCCTTGTG	TTTTTAAAAA
AGCATTTACT	CAGCCTCACT	CCTTTCTCTA	TAAGCATTCC	ACATTCTCAC CAATAGTGTA TAAGCATTCC CCTTTCTCTA CAGCCTCACT AGCATTTACT	ACATTCTCAC
GAACTAATTT	CAGAGGGGCT	CCCTGCTTTT	AACAAAAAAC	TTCATCTCAA AAAAACAAAA AACAAAAAAC CCCTGCTTTT	TTCATCTCAA
AGAGTGAGAC	CTGGGGCACG	GCACTCCAGC	TCACGCCATT	GAGGTTGCAG TGAGCTGAGA TCACGCCATT GCACTCCAGC CTGGGGCACG AGAGTGAGAC	GAGGTTGCAG
CGGGGAGGTG	TCACTTGAAC	GGGAGGAGAA	CCAGCTACTC GGGAGGTTGA GGGAGGAGAA TCACTTGAAC CGGGGAGGTG		ACCTGTAATC
GGTGGTATGC	CTATTTAAAA TACAAAAACT AGCCGGGCGT GGTGGTATGC	TACAAAAACT	CTATTTAAAA	AACATGGTGA AATCCCATCT	AACATGGTGA
CAGCCTGGCC	AGTTCGAGAC	TGAGGTCAGG	GTAGATCAGC	ACTTTGGGAG GCCGAGGTGG GTAGATCAGC TGAGGTCAGG AGTTCGAGAC CAGCCTGGCC	ACTTTGGGAG
TAATCCCAGC	CTCACGCCTG	GGCACAGTGG	CTTTTGGCCG	ATTTTTAAAA ATAATTTCAA CTTTTGGCCG GGCACAGTGG	ATTTTTAAAA
ATTTACTTAA	TAAGTAATTT	CTTTCTTATG	TCACTGCAGG	TCTCTCTGTG CCTTTCTTAT TCACTGCAGG CTTTCTTATG TAAGTAATTT ATTTACTTAA	TCTCTCTGTG
TTAGTTATTT GCACACTCTG		GTTGTATTAT	CAATTTCTTA GTTGTATTAT	TTATTTGAAT	TAATTTATCT
GCAGTCACCA	TTCCTTCCTG	CTCTGTTCAT	ACTCTTTGTA	GACCTCTTTC AGCTATTCTC ACTCTTTGTA CTCTGTTCAT TTCCTTCCTG GCAGTCACCA	GACCTCTTTC

FIGURE 16 (74)

GTTTGTTGGC	TTTTGAATGG	ACTTTTGTTG	TTGATAGTT	NTTGGTCCCA	TCTTTCCTA	GTTCAAAGT	ATGCAGGG	ATTGAATAAG	TGTAGGAGT	TTTGTATCAG
		TAGATATTAG A	TTTCTCCCAT CCTATAGTTC TGTTTACTCT GTTGATAGTT	GTTTAATCTA ATTGGTCCCA	TTTTGAATTT TAATAATAAA TTCTTTCCTA	TTTTCTTCTA GGATTCTTAT AGTTCAAAGT	CTTATATTTA AGCTTTTAAT CCACCTCAAG TTAATTTTTA TATATAGTGA AATGCAGGGG		ATTTTGTCAA CATCGGATGA CTGTAGGAGT	
GATGATTAGT GATATTGAGC ATTGTTTTAT	CTTTTG AGAAGTGTCT TTTCATATAT TCTGCCCATT	TTATAGATTC	CCTATAGTTC	TACAGAAGCT	TTTTGAATTT	TTTTCTTCTA	TTAATTTTTA	CAGCAATCCC AGAACCATTT	CTTTGTCAAA	TACTCTGTTA CATTGGTCTA TGTGTCTGTT
GATGATTAGT	AGAAGTGTCT	TGCTTGTTGA ATTAAGTTCC	TTTCTCCCAT	TTTTTGCTG	TTTTTG TTGCAATGGC	ATTTTCTAGG	CCACCTCAAG		ATTTTGTCAA	TACTCTGTTA
GCAATTCTCT	TCTT	TGCTTGTTGA	TTGTGAATAT	TATGTTTTGT	$ ext{TTTG}$	CCAGAACAGC	AGCTTTTAAT	TTCTTTTGCA TGTGGCCAGC	GAATCTTTTC CTCATTGCTT	CTGGGTTATC
GTTTTCACTT	TGTTCGTATG	AGTTGTTTTG	GATGCATAGT	CCTGTTTTGT	CTTGTCAATT	AGGCTGATGC	CTTATATTTA	TCCTGTTTCA	GAATCTTTTC	GTGGCTTTTT
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FIGURE 16 (75)

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TATGGTCTCA TAACATAGTT TAAAGTTGGA TAATGTTATG CTTTGAAAAA TGACCTTGGC AGTTTGATAG TCATCTACTA TTTCCTTTAG ITTIPAATGG GAITGCAITC ITCAIGIGGC ICTCAGCITG AAIGITAITG GIGIATAGAA TGTAGAGATC CTCCTAGGTA TTTCATTTTT TATGTGACTA TATAGAATCA TATCATTAGC CTTTCCCTTG ATTGCTTTGG GCAGTATGCT ATTTTAATGA TATTGATTCT TACGTTGAAT AGGAGTGCTG AGAGTGAGCA TCCTTGTCTT TGAGGCTCTT CTTACTGAAG CCTTTTATT CTTTGGCTAT TTTGTTTGTG ATCCTGAAAC GTTTTCTAGG TATTTGAATG TATTTTCCA CTTAAGATTG TTTTCTAATT GTTTTGTACA CTGATTCTGT CCTTTGGCAA AGTCTGTAGT CTTCTTTCC TTTTTGTTAC GAATCTATAG TAGTTTTCCT GCTGTTTTTG TAGAATAGTT GAGCATGGAA TCTGATTGCT CTTCCAGTAC AAAGAAAGAT AGTTTGACTT CAATGTTTTT TATCATGCTG CCTCTGCTTT GAATAGCATT TCCTATCCAT ATGCTACAGA GTTCTAGGAG ATATGAATTT

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FIGURE 16 (76)

FIGURE 16 (77)

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	GTTCCACCTC	GTTCCACCTC TCAAGGGAAA TGGTTCCAGC TTTTGCCCCAT TCAATATGAT GTTGGCCATG	TGGTTCCAGC	TTTTGCCCAT	тсаататдат	GTTGGCCATG
	GGTTTGTCAC	GGTTTGTCAC AGATGGCTCT		TATTATTTTG AGGTGTATTC CTTTGATGCC TAGTTTGTCA	CTTTGATGCC	TAGTTTGTCA
	AAGGCCTTTA	AAGGCCTTTA TCATGAAGGG	ATGTTGGATT	TTATTGAAAG	TTATTGAAAG CTTTTTCTGG GTCTTATTTG	GTCTTATTTG
O7.10	GTGAATTGCA	GTGAATTGCA TTTATTGAAT TGTGCATGTT GAGCCAAACT TCCATCCCAG GGATTAAACC	TGTGCATGTT	GAGCCAAACT	TCCATCCCAG	GGATTAAACC
	TACTTAATCA	TACTTAATCA TGGTGTTAAC	TTTTTGATGT	GCTGCTGGAT	TTGGTTTGCT AATTTTTTTT	AATTTTTTT
	TTTTTTAA	TTTTTTTAA AATGGATTCT CCCTCTGTCC CCCAGGCTGG ATTGCAGTGG TGTGATCTTG	CCCTCTGTCC	CCCAGGCTGG	ATTGCAGTGG	TGTGATCTTG
/D 1 05	GCTCACTGCA	GCTCACTGCA AGCTCCACCT	CCCGATTTCA	CCCGATTTCA TGCCATTCTC CTGCCTCAGC CTCCCGATTA	CTGCCTCAGC	CTCCCGATTA
	GCTGGGACTA	GCTGGGACTA CAGGCACCCG CTACCATACC CAGCTAATTT TTGTATTTT TAGTAAAAC	CTACCATACC	CAGCTAATTT	TTGTATTTT	TAGTAAAAAC
	AGGATTTCAC	CATGTTAGCC	AGGATGGTCT	TGATCTCCTG	ACCTCGTGAT	CTGCCTGCCT
	CAGCCTCCCA	CAGCCTCCCA AAGTGGCTAG TATTTTTTA ATTACTATTT TTTCTCACCC TTGCTGCCAT	TATTTTTA	АТТАСТАТТТ	TTTCTCACCC	TTGCTGCCAT
	CTTATGATTT	TCTAGTATTT	TGTTGAAGAT	TTTTGCATCT ATTTTCATCA GGGATATTGG	ATTTTCATCA	GGGATATTGG

	CCTGTAATTT	CCTGTAATTT TCTTTTTCA TTTCATCTTT	TTTCATCTTT	ACCACATTTT	тстатсасст	TCATACTGGC
	TTCATAGAAT	TTCATAGAAT GAGTTCAGGA ATGGTCCCTC	ATGGTCCCTC	CTCCTCGAAT	TTTCTCTGTA GAATTAGTAC	GAATTAGTAC
	CAGCTCTTTG	TGTGTCTGGG	TGTGTCTGGG AGAAGTTGTA TGCCAATAAT	TGCCAATAAT	TTAAATGCAG	ТТААТАТТТА
	CTGGACAATT	CTGGACAATT TCCTCCAGAT AATTGTATAT GATTTTTGGT	AATTGTATAT	GATTTTTGGT	CCACCCTGAG TTGATACATG	TTGATACATG
CONTRACT PORTS	TATTTTAATT	GTATCATGGT	ATGAAAAGAG CAAGAGTATT	CAAGAGTATT	TGGTCACCTA GTCTTGCCTA	GTCTTGCCTA
- 61 11-1-12	TAGATGTGCC	TAGATGTGCC TAATGATTCA AAGTAGATAT	AAGTAGATAT	TTTGGGAGCC	TTTGGGAGCC TAACAGGTGC CGTGACTAGG	CGTGACTAGG
(D. 1- 20)	CAGTTTTGTT	TTTTTTTT	TTTGAGACAG	TTTGAGACAG AGTCTCGTTA TGCTGCCCAG GCTGGAGTGC	TGCTGCCCAG	GCTGGAGTGC
	AGTGGCATGA	AGTGGCATGA TCTCGGCTCA CTGCAACATC CGCCTCCTGG GTTCAAGCAA TTATACTGCC	CTGCAACATC	CGCCTCCTGG	GTTCAAGCAA	TTATACTGCC
	TCAGCCTCCC	TCAGCCTCCC CAGTAGCTGG	GACTACAGGC TCACGCCACC ACGCCTGGCT	TCACGCCACC	ACGCCTGGCT	AATTTTTGTA
	TTTTAGTAG	TTTTTAGTAG AGATGGGGTT	TCACCATATT	TCACCATATT GGCCAGGCTG GTGTTGAACT CCTGGCCTCA	GTGTTGAACT	CCTGGCCTCA
	TGATCCACCC	GCCTCGGCCT	CCCAATGTGC TGGGCTTACA GGCGTGAGCC ACCGCACCCG	TGGGCTTACA	GGCGTGAGCC	ACCGCACCCG

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FIGURE 16 (78)

FIGURE 16 (79)

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GAGATTAGGC	GAGATTAGGC AATTTTATAT TCCCAAATAT	TCCCAAATAT	CCAACTCTTC	TGACCCGCTT	TCTCAGCCTG
GGTGTATCAG	GGTGTATCAG GCACAAGGCC TGTTCAGATT ATGTGGTCTC TGAAGATATG GCTCTCCAGG	TGTTCAGATT	ATGTGGTCTC	TGAAGATATG	GCTCTCCAGG
GTTGACAATG TGGAT	TGGATAAGGA	TTCACCTGGT	TTAGGATTTA	CACATTCGCC	TTGAATGTCT
GTTGCATCAA	GTTGCATCAA GTAGACAGTC CATCCCAACT TGGCCATTTG GTCAGAGCTG TAAGGAGACA	CATCCCAACT	TGGCCATTTG	GTCAGAGCTG	TAAGGAGACA
AGGAGGTGGG CAGCC	CAGCCGCTGC	TGTGAACTGC	TTGGACAAAG	TTGGACAAAG ACTGCCAAAT AGCTATCAGA	AGCTATCAGA
CAGTGTTAAC	CAGTGTTAAC AACAGCTGAT TTAGGTTTGA AGGGGGCAGT CTCTTGGGCC ACTTACTATG	TTAGGTTTGA	AGGGGGCAGT	CTCTTGGGCC	ACTTACTATG
CTGCATCATC	CTGCATCATC CTCTTTGGAA AATGCTCTTC AGGTAACTGÖ	AATGCTCTTC		CTAACAGACT	GAGAAAATAA
AATGCTCACA	AATGCTCACA GAGAAAAAG ACCCGGAAAG TCTGACTTCT CAGAGCTCAG TGTTTAGGTG	ACCCGGAAAG	TCTGACTTCT	CAGAGCTCAG	TGTTTAGGTG
CAGAACTGGA	TTGTGAAAGG	ATTTTTAAAT TTTTTATATT	TTTTATATT	CATTGCAGGG	CATTGCAGGG AACATTCATT
TATTCCATCC TTCTC	TTCTCCACTC	CACTC CCACCTGTCT GTCGTTGTCT TTGTCTCTGT CTCCCCACCT	GTCGTTGTCT	TTGTCTCTGT	CTCCCCACCT
CTCTCTCTAG ACACA	ACACACACAC	CACAC ACACACACA ACACACAC ACACACAC ACACACACAC	ACACACACAC	ACACACACAC	ACACACACAC

FIGURE 16 (80)

ACACACACAC	ACACACACAC ACACACAC ACACACCC CTATTCATTG CCAACAGTAA TAGAGTTGCTTCATTACTTC TTGGAGAAA AAGCCTCAAT CTGAGGAAGC TGTGCTGACT AGCCTTGCTC	ACACACACCC	CTATTCATTG	CCAACAGTAA	TAGAGTTGCT
CATGG	TTAATCATGG AGACAATGCT TTATGCCTTT ATCTTTGCAC AGCTGAAAGC CATGGCAGAA	TTATGCCTTT	ATCTTTGCAC	AGCTGAAAGC	CATGGCAGAA
rccrcr	GCAGTCCTCT AAACGAAATA AAATAGAAAG GTTCCTGCTA AGCCCTGGCA AATGCAGCCT	AAATAGAAAG	GTTCCTGCTA	AGCCCTGGCA	AATGCAGCCT
CCCTC	TCTATCCCTC CCCCAACACT CACAGCTTCT GAGCAAGATG TAGCTGCCTT	CACAGCTTCT	GAGCAAGATG	TAGCTGCCTT	CCAGGAGGCT
BATGGG	GGGTGATGGG CAATAATGAG CAGAGCCACG	CAGAGCCACG	TGAAGGAAAG ATGGGTGAAG AAATGTGTGT	ATGGGTGAAG	AAATGTGTGT
STCATG	GGAGGTCATG CTGGCTGCAC TGACCATGAA ACAAAGGATC TACCCCTCTA GTAACTGCCC	TGACCATGAA	ACAAAGGATC	ТАССССТСТА	GTAACTGCCC
CCTTTG	TACTCCTTTG GTAACTGTTC	ТСАААТТАТА	TGAAATTATA ACTTGCCAGA AGTTCAGAAG GACCTAGTGC	AGTTCAGAAG	GACCTAGTGC
ATTAGA	AGGTATTAGA GGAAATTCGT AAGATTGAGC CATTTATTCC TGCACAGATA	AAGATTGAGC	CATTTATTCC	TGCACAGATA	CATAATAATG
ეენმმე	GACACGGGCC ATGGTGGCCA GCATTCTTGC TCTTGACAAT GGTGAAGGGA AGGGTTGTAG	GCATTCTTGC	TCTTGACAAT	GGTGAAGGGA	AGGGTTGTAG
GTCATGGCTA	TGCTCTCAGA ATTATAATGG AAAGAAACAG CTCCTGAGTG TTTACTATGA	ATTATAATGG	AAAGAAACAG	CTCCTGAGTG	TTTACTATGA

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FIGURE 16 (81)					
CCAAGGGCT	GCCAAGGGCT GTGCTAAACA CTTTACCATA TGATGACATC TTTTTCTCAC AGGTATCAAA	CTTTACCATA	TGATGACATC	TTTTTCTCAC	AGGTATCAAA
AAACAATAGG ACAT	ACCGGA	TAGCTACAAT CTTTGGGCCC CTGCAAACAC AATAATGTGT	CTTTGGGCCC	CTGCAAACAC	AATAATGTGT
ATTCTCTTCT TCAA	ATCCTA	CATATTGCTA CAAACTGTAT CCCTGAGGCA TATTCATTGT	CAAACTGTAT	CCCTGAGGCA	TATTCATTGT
аааатааааа сата	CATATAAAGT	ACTACTTTG	TTTTTGAGA TGGAGTCTCG CTCTGTCACC	TGGAGTCTCG	CTCTGTCACC
CAGACTGGAG TGCA	TGCAATAGCA	ATAGCA TGATCGTGGC TCACTGCAAC CCCCTGCTCC TGGGCTCAAG	TCACTGCAAC	CCCCTGCTCC	TGGGCTCAAG
TGATTCTCCT GACT	GACTCAGCCT	CTCAAGTAGC	TGGGATTACA GGCGCACGCC CCCATGCCTG	GGCGCACGCC	CCCATGCCTG
GCTAATTTT	GTACTTTTAA	TAGAGACCAG GTTTCACCAT GTTGGCCAGG CTGGTCTCAA	GTTTCACCAT	GTTGGCCAGG	CTGGTCTCAA
ACTCCTGACC TCAA	TCAAGTGATC	GTGATC CACCTGCCTC GGCCTTCCAA AGTGCTGGCA	GGCCTTCCAA	AGTGCTGGCA	TTACAGATGT
GAGCCACTGC ACCC	ACCCGGCCCA		TATAAAGTAC TACTAATGTA ACAGGGTGCT AGTCCAGACA	ACAGGGTGCT	AGTCCAGACA
TGACCACAC	GTGACCACAC GTGGTGTTCA TTGAAGGCTG GACTAACAAC TCCAGCCTCT CCGCCATCAC	TTGAAGGCTG	GACTAACAAC	TCCAGCCTCT	CCGCCATCAC

TGG	GA	4	Ø	()	7)	ליז	F	F	드
CACTCTT	TCATTCCT	CCAACTTTA	GAGACTATG	AACTCCAGA	TCTTGAAGT	GACCCAGAT	GTCCTATT	CGACTAGCA	AGGGCTCTC
TGCTGCTGCT	GTCTGTGGCT	TCTGGACACG	TGAAGTCAGC	TGAAGGAAGA	GCGGCTTCAT	ACATTTTGGT	TTGTTATTCT	CAGTTAAAAG	GGCTGCCAGA CTTAAGAGAC TAAAGACACG GGTGTCAGAC TTTCTGGGAA AGGGCTCTCT
CAATAAATCT	CACCGTGAGG	AACAAACAAC	GCTTCACCTC	TCTGAACATC	GCAAGGGTCT	AATTCCGGAC	CCCCTTTCAC	ACCTGTCAGC	GGTGTCAGAC
TTGCTCTTCA	CTGTAACACT	CACTGGGAGG	AAGGTCTGCG	TCCAGACACA	AACACTCACT	GGAAGGAAAC	GTACCATCAA	AATATTGGGC	TAAAGACACG
CTTTGTTCTT	TCTTTATGAG	ACCACAAACC	ATTCACTGCG	AGGAAGAAAC	TAAGAGCTGT	AGAACCCACT	CAAGTGGTGA	TCGGGGGCTA	CTTAAGAGAC
GCTGTGGAAG	GTCTGCACTA	AGTCAGTGAG	GAGCTGTAAC	ACCCACTGGA	ACACCATCTT	AGCAAGACCA	GGACTATCAC	TCCTTAGAAT	GGCTGCCAGA
	GCTGTGGAAG CTTTGTTCTT TTGCTCTTCA CAATAAATCT TGCTGCTGCT CACTCTTTGG		GCTGTGGAAG CTTTGTTCTT TTGCTCTTCA CAATAAATCT TGCTGCTGCT CACTCTTTGG GTCTGCACTA TCTTTATGAG CTGTAACACT CACCGTGAGG GTCTGTGGCT TCATTCCTGA AGTCAGTGAG ACCACAAACAAC TCTGGGACG CCAACTTTAA	GCTGTGGAAG CTTTGTTCTT TTGCTCTTCA CAATAATCT TGCTGCTGCT CACTCTTTGG GTCTGCACTA TCTTTATGAG CTGTAACACT CACCGTGAGG GTCTGTGGCT TCATTCCTGA AGTCAGTGAG ACCACAAACCAC TCTGGACACG CCAACTTTAA GAGCTGTAAC ATTCACTGCG AAGGTCTGCG GCTTCACCTC TGAAGTCAGC GAGACTATGA	GCTGTGGAAG CTTTGTTCTT TTGCTCTTCA CAATAAATCT TGCTGCTGCT CACTCTTTGG GTCTGCACTA TCTTTATGAG CTGTAACACT CACCGTGAGG GTCTGTGGCT TCATTCCTGA AGTCAGTGAG ACCACAACC CACTGGGAGG AACAAACAAC TCTGGACACG CCAACTTTAA GAGCTGTAAC ATTCACTGCG AAGGTCTGCG GCTTCACCTC TGAAGTCAGC GAGACTATGA ACCCACTGGA AGGAAGAAAC TCCAGACACA TCTGAACATC TGAAGGAAGA AACTCCAGAC	GCTGTGGAAG CTTTGTTCTT TTGCTCTTCA CAATAAATCT TGCTGCTGCT CACTCTTTGG GTCTGCACTA TCTTTATGAG CTGTAACACT CACCGTGAGG GTCTGTGGCT TCATTCCTGA AGTCAGTGAG ACCACAAACC CACTGGGAGG AACAAACAAC TCTGGACACG CCAACTTTAA GAGCTGTAAC ATTCACTGCG AAGGTCTGCG GCTTCACCTC TGAAGTCAGC GAGACTATGA ACCCACTGGA AGGAAGAAAC TCCAGACACA TCTGAACATC TGAAGGAAGA AACTCCAGAC ACCCACTGGA TAAGAGCTGT AACACTCACT GCAAGGGTCT GCGGCTTCAT TCTTGAAGTC	GCTGTGGAAG CTTTGTTCTT TTGCTCTTCA CAATAAATCT TGCTGCTGCT CACTCTTTGG GTCTGCACTA TCTTTATGAG CTGTAACACT CACCGTGAGG GTCTGTGGCT TCATTCCTGA AGTCAGTGAG ACCACAAACC CACTGGGAGG AACAAACAAC TCTGGACACG CCAACTTTAA GAGCTGTAAC ATTCACTGCG AAGGTCTGCG GCTTCACCTC TGAAGTCAGC GAGACTATGA ACCCACTGGA AGGAAGAAAC TCCAGACACA TCTGAACATC TGAAGGAAGA AACTCCAGAC ACCCACTTT TAAGAGCTGT AACACTCACT GCAAGGTCT GCGGCTTCAT TCTTGAAGTC AGCAAGACCA AGAACCCACT GGAAGGAAAC AATTCCGGAC ACATTTTGGT GACCCAGATG	GCTGTGGAAG CTTTGTTCTT TTGCTCTTCA CAATAAATCT TGCTGCTGCT CACTCTTTGG GTCTGCACTA TCTTTATGAG CTGTAACACT CACCGTGAGG GTCTGTGGCT TCATTCCTGA AGTCAGTGAG ACCACAAAC CACTGGAGG AACAACAAC TCTGGACACG CCAACTTTAA GAGCTGTAAC ATTCACTGCG AAGGTCTGCG GCTTCACCTC TGAAGTCAGC GAGACTATGA ACCCACTGGA AGGAAGAAAC TCCAGACACA TCTGAACATC TGAAGGAAGA AACTCCAGAC ACACCATCTT TAAGAGCTGT AACACTCACT GCAAGGGTCT GCGGCTTCAT TCTTGAAGTC AGCAAGACCAC GGAAGGAAAC AATTCCGGAC ACATTTTGGT GACCCAGATG GGACTATCAC CAAGTGGTGA GTACCATCAA CCCTTTTCT GTCTTATTTT	GCTGTGGAAG CTTTGTTCTT TTGCTCTTCA CAATAAATCT TGCTGCTGCT CACTCTTTGG GTCTGCACTA TCTTTATGAG CTGTAACACT CACCGTGAGG GTCTGTGGCT TCATTCCTGA AGTCAGTGAG ACCACAAACC CACTGGGAGG AACAAACAAC TCTGGACACG CCAACTTTAA GAGCTGTAAC ATTCACTGCG AAGGTCTGCG GCTTCACCTC TGAAGTCAGC GAGACTATGA ACCCACTGGA AGGAAGAAAC TCCAGACACA TCTGAACATC TGAAGGAAGA AACTCCAGAC ACCCATCTT TAAGAAGTGT AACACTCACT GCAAGGGTCT GCGGCTTCAT TCTTGAAGTC AGCAAGACCA AGAACCCACT GGAAGGAAAC AATTCCGGAC ACATTTGGT GACCCAGATG GGACTATCAC CAAGTGGTGA GTACCATCAA CCCTTTCAC TTGTTATTCT GTCCTATTTT TCCTTAGAAT TCGGGGGCTA AATATTGGGC ACCTGTCAGC CAGTTAAAAG CGACTAGCAT

TTTGG AGTTGGGAGC GTTGGTTTGC CTGGAACCAG CTGAG ACGAGGGTCA ACAGAGAGA AAGCCATTCA ATCTA TCCTATCTAT CCTGACTCTT GCTTCCTGGG CCTCT TGTCTCTGTT CTCCAAGGCT AGTCCCACTT GCTTT AGGCACCGG GCTCACCAAT CAGAAAGCCA AGGGG GGACTATCTG GAATTTTAGG ATCCCTCCTC TTCCT GAAGCTAGGA TATGGGGAGC CTCAGAAATG AAAAG GCATCACTCT TCCAATTCTG GAAATCCCTT	AATAACCCCC AACTCTTTGG AGTTGGGAGC GTTGGTTTGC CTGGAACCAG CTTCCACATT TCCTGTACTT CTGGGCTGAG ACGAGGGTCA ACAGAGAGA AAGCCATTCA GCTCTGGGGT CCCGACAGCA AGTTGGTTGA CCCTGTGGCC ATGAACAGAA CTCTCGAAGT CATGTTGCCC AAGCGAGACT CACCCATCTA TCCTATCTAT CCTGACTCTT GCTTCCTGGG TCCTAATGCC TGGAAGACAA AACTTCCTCT TGTCTCTGTT CTCCAAGGCT AGTCCCACTT CTAAAAACCA CTCCCTGTCT TCTCTTTT AGGCACCGG GCTCACCAAT CAGAAAGCCA TAATTTTGC CCAAAGCCCC ATCTTAGGGG GGACTATCTG GAATTTTTAGG ATCCCTCCTC AGACAAGCAG GCCTAACAAA AGCTATTCCT GAAGCTAGGA TATGGGGAGC CTCAGAAATG ATATCCTTCC TATTCAAGTG AGGACAAAAG GCATCACTCT TCCAATTCTG GAAATCCCTTC TATTCAAGTG AGGACAAAAG GCATCACTCT TCCAATTCTG GAAATCCCTTC TATTCAAGTG AGGACAAAAAG GCATCACTCT TCCAATTCTG GAAATCCCTTC TATTCAAGTACTAATTCTAA	rccacatt	rctggggt	retteccc	CTAATGCC	CTAAAAACCA	FAAACTCC	TAATTTTGC	ACAAGCAG	ATATCCTTCC	CTCCCTCA	(H) (K) (K) (K) (K) (K) (K) (K) (K) (K) (K
		GAACCAG CT	CCATTCA GC	TCGAAGT CA	TCCTGGG TC		TTTCTAG TA		CCTCCTC AG		ATCCCTT CC	
		GGTTTGC CTG	GAGAGGA AAG	AACAGAA CTC	GACTCTT GCT	CAAGGCT AGT	ATAAGAA TGA		TTTTAGG ATC		AATTCTG GAA	
		reggage gtt	AGGGTCA ACA	rGTGGCC ATG	PATCTAT CCT		GTTTCT CCT		TATCTG GAA	CTAGGA TAT	CACTCT TCC	\(\frac{1}{2}\)
	CCCCC AACT TACTT CTGG CAGCA AGTT SACAA AACT TGTCT CTGG TGTCT CTGG TGTCT TCTC TGTCT ACAAA AGCT ACAAA AGCT	CTTTGG AGTI	GCTGAG ACGA	GGTTGA CCCI		CCTCT	TGCȚTT TCTA	$ ext{TCTT}$		TTCCT	CAAAAG GCAI	

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CCAATGCTAA CAGGAGAATG TTTAGGACTC TAACAGGTTT TCAAGAATGT GTCGGTAAGG TTGTGGTCTA GGAGGACAGG TAAGGGTGCA CCTCCTTGTG TGCATCAGTG AGCGCAACTA TTCCAATCAA TGCATTGGTG GTCGGGGGGT TTCAGATGGG AAACACTCAG CTAAGCCATT GGGACTAATT TGACCCGCAA ACCCTGAAAA AGAGTGGCTC ATTTTATTCT GCACTATGGC CTGGTCCCAA TATTCTCTCT CTGCAGCTTG ATTCCTTGGT TTTCTGCTGC GGGTTCTTGG CAATACTATC TAAATCTGAC GCAAGAGGTG TTCCAATCAG CAGGGTCCAG TGACCTTTGC GGGGGGAACA AACAGACCAA AACTGGGGGC AGTTTTGTCT GTATAAATTA TTTCTGCTGC CAGGGTCCAG GGACCATTGT GGGTTCTTGG CCGATTTTC TCAGTCCTCT GCACCAACAG GCTCACCCTT GAAATGTATC AAAATGGCCA CCTGAAGGAA TAAGGGCCAC GTCTAGGAGG AAAACTAGTG GGTTTTCAAA AATGTGTTGG CTGATGGGGA GCCACTAAAT GGCTCAACTA

TTATGTCCAA ACTTTCTTT

TAAGAAGGAA AGCAAATGGA GTGAAATACC

ACCTTTTCTG

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FIGURE 16 (85)

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CATTAAAGGA AAATCCACAA CTATGCAAAA CTTACAATTC ACATCCCACA AGAGGACCTC GATAAGCCTC CTTAATCTCC CCCACCCAGA AGGAAACAAG CAAAGAAATC TCCAAAGGAC CACAAAAACC CCTGGGCTAT CGGTTATGTC CCCTTCAAGC TGTAGCGGGG GAGGGGAATT TGGCCCAACC CCAGGGGAAG GTCTAGGGCA AACCTTCAAT TTTAAAGAAT GATACCTGGT ATCTTAGTCA AGTAAATGAT AGCAAGCCAT CCCTAGTGTG TGGGACTGGA GTCGCAAACA TCTGTTGACC TGTGTTCTAG AAAGACTAAG GAGAATTAGG AAAGAGCCTA TGAATTATTC AATGATGTCC TCCTATTAAT TCAAGGCAGA GATCAAACCC TGGCCTTTAA GTCCTACAGG TCTCCCGGTC TAGCTCCCCT TTAAAGCAGA AGCTTCCCTA CTCACTTGGA GAGATGTCAT GCTATTGTTA CCACAGCCCG AGAGTTTGGA AGAATGACAG CTGGGGAAAG GGACAAAGTC GATCCCCACT GGGACCTAGA CTCAGATCAT CCTCTCTGAT CTTTCAGATG ATCCTGATAG GTATACAGAT TCAGCTTACC CCCATATCAT CAGGTACATG TCCCCTTCTC GTGGCTTTAG

SUBSTITUTE SHEET (Rule 26)

FIGURE 16 (86)

FIGURE 16 (87)

ACCATAACTC	ACCATAACTC AGGAAAAGGA AGAAAGTCTT GCCTTTCCCTT GAGTGGCTAC AGGGAGGCCT	AGAAAGTCTT	GCCTTCCCTT	GAGTGGCTAC	AGGGAGGCCT
TAAGGAAAAT	TAAGGAAAAT ATAACTCCCC	TGTCACCCAA	CTCACTTCAA	TGTCACCCAA CTCACTTCAA GGGTTAATTG ATTCTAAAAG	ATTCTAAAAG
ATATGTTTAT	ATATGTTTAT TACTCAATCA GCTGCAGATA TCAGGAGAAA GCTCCAAAAG CAAGCCCTTG	GCTGCAGATA	TCAGGAGAAA	GCTCCAAAAG	CAAGCCCTTG
GCCCTGAACA	GCCCTGAACA AAATCTGGAG GCATTATTAA ACCTGGCAAC CTTGGTGTTC	GCATTATTAA	ACCTGGCAAC		TATAATAGGG
GCCAAGAGGA	GCCAAGAGGA GCAGGCCAAA ATGGAAAAGC GAGATAAGAG AAAGGCCACA GCCTTAGTCA	ATGGAAAAGC	GAGATAAGAG	AAAGGCCACA	GCCTTAGTCA
TGGCCCTCAG	TGGCCCTCAG ACAAACAAAC CTTGGTGGTT			CAGAGAGGAC AGAAAATGGA GCAGGCCAAT	GCAGGCCAAT
CACCCAGTAG	CACCCAGTAG GGCTTGTTGT CAGTGTGTTT TGCAAGGACA GTTTAAAAAA GATTGTCCTA	CAGTGTGGTT	TGCAAGGACA	GTTTAAAAAA	GATTGTCCTA
TGAGAAACAA	TGAGAAACAA GCTGCCCCCT CACCCATGTC CACTATGCTG AAGCAATCAC TGGAAGCCAC	CACCCATGTC	CACTATGCTG	AAGCAATCAC	TGGAAGCCAC
ACTGCCCCAA	ACTGCCCCAA AGGACAAAGA TTATCTGGGC CAGAAGCCCC CAAGCAGATG ATCCAACCAC	TTATCTGGGC	CAGAAGCCCC	CAAGCAGATG	ATCCAACCAC
AGGACTGAGG	AGGACTGAGG GTGCTCAGGG	TTAGCGCCAG	CTCATGTCAT	TTAGCGCCAG CTCATGTCAT CACCCTCACT GAGCCCTGGG	GAGCCCTGGG
TACATTTAAC	TACATTTAAC CATTGAGGGC CAGGAAATTG ACTTCCTACT GGACACTGGT GCGGCTTTCT	CAGGAAATTG	ACTTCCTACT	GGACACTGGT	GCGGCTTTCT

FIGURE 16 (88)

CAGTGTTAAC CTCCTGTCCT GGACAGCTGT CCTCAAGGTC TGTTACCATC CGAGGAATCC	TTGTAACTGG GAGACTTTGC	TACAGATAGT AAGTATGCTT ACCTAATCCT ACATGCCCAT GCTGCGATAT GGAAAGAAAG	AAGGAAACTA TGGAGTTATT	GCACACAGTG CAAAAACCCA AGGAGGTGGC GGTCTTACAT TGCCGAAGCC ATCAAAAGGG	GCTGGCAGAG GCAGGGAAAG ACAAGCAGAA	AGGAAAGAGA GAAAGACAG AAAGTGAGAG AGAAAGAGAG ATAGGAAGTG ATAGCAAAGA	AGAGGAGAGA GAGAGGGGGA AAGACAGAGA GAGACAGAGG	AAGAGACAGA GAGACAGAAA GAGAGAAGCA AAGAGAAA GAGACAAAGA AGGAGTCAAA	TATTCCTTTA AAAGCCAGGT	TAATT GATAATTGAA GGCCTTTTCT GTAACCCTAT AATACTCCAA
CCTCAAGGTC '	TATTTCTCCC ACCTCCTCAG	ACATGCCCAT (TAAATATCAC AAGGAAACTA	GGTCTTACAT	GCTGGCAGAG	AGAAAGAGAG 1	GAGAGGGGA 1	AAGAGAGGAA (GGCCTTTTCT C
GGACAGCTGT	TATTTCTCCC	ACCTAATCCT	<u> GAACCCCCAT</u>	AGGAGGTGGC	AGCATAAGTG	AAAGTGAGAG	AGAGGAGAGA	GAGAGAAGCA	GTAGT AAAGAAAAA CAGTGTACCC	GATAATTGAA
CTCCTGTCCT	TGGGACAGCC TATATCCAGG	AAGTATGCTT	GGAATTCCTA ACTTCTGGGT	CAAAAACCCA	GAAGGAGAGG GGAGAACTGC	GAAAGAGCAG	GGGAGTCCGA AAGAAAGAG	GAGACAGAAA		ACCTATAATT
CAGTGTTAAC	TGGGACAGCC	TACAGATAGT	GGAATTCCTA	GCACACAGTG	GAAGGAGAGG	AGGAAAGAGA	GGGAGTCCGA	AAGAGACAGA	GAGAGGGAAA GAGAA	TAAATTTAAA ACCTA

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CCCAGGTGAT TAAGGAAAAT AGGAGGAACT GCCTTCAGGA CAGGATGATA GATGGTTCTTACCCAGGTGAT TAAGGAAAAT TGCCTAATAA GTGGTCTGCT CAACGTTGA AGCTGTTTGC TGTTTGCACT CAGCTAAAC TTAAAGTACT TACAGAATCA GGAAGGAGCC ATCTATACCA ATTCTAAGTT AATATGGACT GAACGAGGTT TTATTAATAG CAAAGAAAAT TAAAATCTCA AACTTACAAG GTTTTCAACT AAAGTAAAGT TTGCTAAAAG TTAACAGCGT AACATGTATT ATCCTACTAC CTCACACTCT CTCAAAGGAT TTCTCAGACA GTTTGCAAAA AAGAACGAA TCTGTCCTTAC CTCACAATC CCAAATAGAC TCTTTGGCAG CAGTGACTCT CCAAAACGAAA TCTGTCCTTA CTCTACAATC CCAAATAGAC TCTTTGGCAG CAGTGACTCT CCAAAACGGAAA TGAGGCCTAG ACTCTCTTAC TGCTGAGAAA GGAAGATTCT GCACTTCTTA GGGGTAGAGT	CAGGATGATA AGTGATAAGG CAAAGGAGCC CAAAGAAAAT TTAACAGCGT GTTTGCAAAA CAGTGACTCT	GTATTCAGGA CAGGATGATA GTATTCAGTA AGTGATAAGG GTGGTCTGCT CAAACGTTGA TACAGAATCA GGAAGGAGCC TTATTAATAG CAAAGAAAAT TTGCTAAAAG TTAACAGCGT TTCTCAGACA GTTTGCAAAA TCTTTGGCAG CAGTGACTCT GGAAGATTCT GCACTTCTTA	AAAAA GACACAATGG AAAAT TGCCTAATAA AAACC TTAAAGTACT GGACT GAACGAGGTT CAACT CTCAAAGGAT CAATC CCAAATAGAC	TAAGGAAAAA TTAGGAAAAA TTAGGAAAAT CAGCTAAACC AATATGGACT GTTTTCAACT CTCACACTCT CTCTACAATC	CCCAGGTGAT TAAGG AGAAGCAGAG TTAGG TGTTTGCACT CAGCT ATTCTAAGTT AATAT AACTTACAAG GTTTT ATCCTACTAC TCTGTCCTTA CTCTA TGAGGCCTAG ACTCT
TCCTAACAGG GAATCTAAAT	TCCTAACAGG	ACAGCAGGTT	TCAAA AATCCTTAAC ACAGCAGGTT		CCCGTAGCCT TCTTA
AGTGT AAACAAGGGT ATAGCCCAAA AGCACTGAGG CCACTGACAA	AGCACTGAGG	ATAGCCCAAA	AAACAAGGGT	TTGTCAGTGT	TACCACCTTG TTGTC

FIGURE 16 (90)

TTACAGGAAA	AGTTGGGCGA	GCATTTGGGC	ATCAAGCTAC	TGTAA CCCCAAATGA GCTCAACTAA CAACTTCTGC TGAGGACCCC	CCCTCTGGAG GACACTACCA	TTCAC CCCTATCCAG CAGGAAGTAG CTACAGCGGT CATCGCCAAA	GAGAGGTGAA GCCAGCTGGG	TGTAAATGCA	ACTCTGTAAA	GGCCACCCGA
CACCCAGTGT	GACAA TGCCTTTCAA ACTCTTATAC CAACCTCTGG	GCTAATAGTC	GATCGAGGCC	CAACTTCTGC	CCCTCTGGAG	CTACAGCGGT	GAGAGGTGAA	GCTAAAGGAT	AGCTAAAGGA TTGTAAATGC ACCAATCAGC ACTCTGTAAA	AGTAAAAACT
TATGAGATAC	ACTCTTATAC	CAGCCATCTT	TTTCCTCTAG	GCTCAACTAA	TAAAGAGCTC	CAGGAAGTAG	TCCTGTTTGG AGGGGGGATT	TTTGTGTCTA	TTGTAAATGC	CAAATAAGGG
TCAGGGATAA	TGCCTTTCAA	GGTCCTGTGA	GTCAAATTTG	CCCCAAATGA	TTCAATGGCC	CCCTATCCAG	TCCTGTTTGG	TTGGAGAACT	AGCTAAAGGA	TGGGCGGGGT
GTTGTTTTTA TACTAACCAG TCAGGGATAA TATGAGATAC CACCCAGTGT		CATGGCTTCT CCCCTTTCTA GGTCCTGTGA CAGCCATCTT GCTAATAGTC GCATTTGGGC	TAACCTCTTG	ACAAATGTAA	GCCCT	CCTTCTTCAC		CTTCTGGGTC AGGTGGGGAC TTGGAGAACT TTTGTGTCTA GCTAAAGGAT TGTAAATGCA		ATGGACCAAT CAGCAGGATG TGGGCGGGGT CAAATAAGGG AGTAAAAACT GGCCACCCGA
GTTGTTTTA	AGGCTTCTGA AATCA	CATGGCTTCT	CCTGTATTTT TAACC	AGATGATCTT ACAAA	TGGACCGACC CGCTG	CTGCAGGGCC CCTTC	TCCCAACAGC AGCTGGGGTG	CTTCTGGGTC	CCAATCAGCA CTCTGTGTCT	ATGGACCAAT

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GTAGTAGTCT	TTTGTAGACA	GAAGACAGTT	ATAATCTAAG	TGGAAGCAGG GCCAGGAAAT ATAATCTAAG GAAGACAGTT TTTGTAGACA GTAGTAGTCT	TGGAAGCAGG
CAAACCTAGC	GTGGGAATTG TTATGGACCA GGCTTGAGAT GCACATAGGG CATTTCTGAT CAAACCTAGC	GCACATAGGG	GGCTTGAGAT	TTATGGACCA	GTGGGAATTG
AGGAGCACAT	GCAGCCTTAA GGAAACAGAG AATGGTTTGG AGGAGCACAT	GGAAACAGAG	GCAGCCTTAA	TCCATT	CAGTCATTGA AGTC
AGGGTTACTC	ATTTTGATC TGTGGCTTCC AGGGTTACTC		ACAGTA GGAAATCTGT	AGACACAGTA	AACAAATTCC AGAC
CACCGGAAGG	GTGGCT TCATTCTTGA AGTCAGCAAG ACCAAGAACC CACCGGAAGG	AGTCAGCAAG	TCATTCTTGA	GTCTGTGGCT	CACCGCAAGG GTCT
CTGTAACACT	CACACCTGAA TATCTGAAGG AACAACTCC AGACACACCA TCTTTCAGAG CTGTAACACT	AGACACACCA	AACAAACTCC	TATCTGAAGG	CACACCTGAA
AAACTCTGGA	TGCAGCTTCA CTCCTGAAGT CAGTGAGACC ACAAACCCAC CAGAAGGAAG AAACTCTGGA	ACAAACCCAC	CAGTGAGACC	CTCCTGAAGT	TGCAGCTTCA
TGCGAAGCTC	TAACACTCAC TGCGAAGCTC	TTAAGAGCTG	TGTGCTGCCT	AAGGAACAAA GAACTCCCGA TGTGCTGCCT	AAGGAACAAA
AACCCACTGG	TGGCTTCATT CCTGAAGTCA ACAGACCACG AACCCACTGG	CCTGAAGTCA		ACACTCACTG CGAGGGTCTG	ACACTCACTG
ATGAGCTGTA	CACTACCTTT	TTTGTGTCCA	CTGCTCATTC	CTTCACAATA AATCTTGCTG CTGCTCATTC TTTGTGTCCA CACTACCTTT	CTTCACAATA
TTCTTTTGCT	GCCAGCAGTG GCAACCCACT CGGGTCCCCT TCCACACTGT GGAAGCTTTG TTCTTTTGCT	TCCACACTGT	CGGGTCCCCT	GCAACCCACT	GCCAGCAGTG

FIGURE 16 (91)

FIGURE 16 (92)

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AGTTGGGGAT	TCTAACAAGA TGTGAGTCAG GGGTTGGGAG GTACTGAGTC TGAGTTGGGC AGTTGGGGAT	GTACTGAGTC	GGGTTGGGAG	TGTGAGTCAG	TCTAACAAGA
TGAGAAATGC	TTTTGAAGCA ACTGTTACAG GAATCTGGTG TGAGAAATGC	ACTGTTACAG	TTTTGAAGCA	CATTCTCAGT	GCCATGCTTG
TAGAGAAATG	TTATTATCTC CACTTTATAG ATAAGGAAAC TGAAGTACAG AAAGGTCAAG TAGAGAAATG	TGAAGTACAG	ATAAGGAAAC	CACTTTATAG	TTATTATCTC
GTCAGTGCTG	CTTAACAATA GCCCTATGAA GTCAGTGCTG	CTTAACAATA	CTCATTTAAT	AAGTGTTTTA CATGGATTAA CTCATTTAAT	AAGTGTTTTA
GCAATACACT	AATCAAGAAT ATTGACAGGT AACATTTATT CAACACTTAC TATGCACCAG GCAATACACT	CAACACTTAC	AACATTTATT	ATTGACAGGT	AATCAAGAAT
AGGAAAATAT	CTGGGTGACA GAGCGAGACT CTGTCTCAAA AAAAAAAAA AAAAAAGGAA AGGAAAATAT	AAAAAAAAA	CTGTCTCAAA	GAGCGAGACT	CTGGGTGACA
GCACTCCATC	TCTCTTGAAC TTGGGAGGCA GAGGTTGCAG TGAGCCAAGA TCACACCACA GCACTCCATC	TGAGCCAAGA	GAGGTTGCAG	TTGGGAGGCA	TCTCTTGAAC
GGCAGGGAA	TAGCCTGGTG TGGTGGCACG CATCTGTAAT CCCAGTACTC AGGAGGCTGA GGCAGGGGAA	CCCAGTACTC	CATCTGTAAT	TGGTGGCACG	TAGCCTGGTG
АТАСАААААТ	GCGTTCGAGA CCAGCCTGGC CAACATGGTG AAACCCCGTC TCTACTAAAA ATACAAAAT	AAACCCCGTC	CAACATGGTG	CCAGCCTGGC	GCGTTCGAGA
ACAAGGTCAG	TGGCTCATGC CTGTAATCCC AGCACTTTGG GAGGCCAAGG GGTGTGGATC ACAAGGTCAG	GAGGCCAAGG	AGCACTTTGG	CTGTAATCCC	TGGCTCATGC
CCAGGTGCGA	TTGCATCTGA GACATGTAGA TTATCAAGCA ATTAATTAGA AAAAATATAG CCAGGTGCGA	ATTAATTAGA	TTATCAAGCA	GACATGTAGA	TTGCATCTGA

FIGURE 16 (93)

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GCTTGACAGA GAAGCTGACA CTTGGCAACT CTGTGGGACC TTGAAGGGTT AGAGGGACTT CACCAAAGAA ACTGGTGGTC AGGGAAACGG GAGGGTCACG GCAAGGAGGG AAAGGAAACT GTACCACAGC AGAGAGTCTG AAGCTACTAC AGTGTAGTTC TTTAAGGTAA ACTTATAACC TCATGCAAAT ATAAAATGAA ATTAATGAGG GAACCTGTAA GATGTTACAG GGAATGCTGA TATCCACAGA GAAATAATCA GTTGCATTTC CAGAATTATA AAATAACTCA AACACAATGA AAGGCAGATA TAACCCACAA CAGGCAATAA GACTGGATGG TTGCATCATT ACCAATTTTT CCACATCCAG GATGTTTTT TCTCATTTCA AAGTCTTTCA GGATAATTCA AATAAATCCA TGCACATATG TAGGCAATAA AAGGAATTGT TACTGTATGG TAATTTATTA TTTTCTACAG TAAACTGATT CAAGITITIC IGATAAGGGA GIGICAATAA GGAAGGATGG ATGAAGAACA GAATAATTAT GATACAATAT CACGTGTCAA AGATCTTATT AAAGTAGATG ATTCAGTTGC CCAGTTCAAA AGCGTATAAA AATGAATTTA ACATAACAAA CTACAACTAA TGGTATGATA

FIGURE 16 (94)

GGGGTATCTT CCTCCTCATC TGGGCCTCCA	CGCGTGGCAC ACATTCAATA CGATGGAAGC CTGTACCAGT CAGTATTAGT GGGGTATCTT TAAGAGTGAC CAGAATTAAG GGGGGTTTTC ACCAAAGCCT GAGGACTGAG CCTCCTCATC CTAAATTCAG ACACAATGCT GTACCTATGC ATTTGCCTCC AGGCTGTTCC TGGGCCTCCAGG GGGACTGGCC CAGGCTCCTG ATAAATAGGG ACTCCCAACA ACATAAAGCC TGGATTTTGG	CTGTACCAGT CAGTATTAGT ACCAAAGCCT GAGGACTGAG ATTTGCCTCC AGGCTGTTCC ACTCCCAACA ACATAAAGCC	CGATGGAAGC GGGGGTTTTC GTACCTATGC ATAAATAGGG	CGCGTGGCAC ACATTCAATA TAAGAGTGAC CAGAATTAAG CTAAATTCAG ACACAATGCT GGGACTGGCC CAGGCTCCTG	CGCGTGGCAC TAAGAGTGAC CTAAATTCAG GGGACTGGCC
GGGGTATCTT	CAGTATTAGT	CTGTACCAGT	CGATGGAAGC	ACATTCAATA	CGCGTGGCAC
CTGTGCTAGG	AAGAATGCAA AATGATGGCT AATATTTGAG TGCTTATGAT GGGCCAGGGG CTGTGCTAGG	TGCTTATGAT	AATATTTGAG	AATGATGGCT	AAGAATGCAA
ATGGTCTTAA	GACGTCTATG TTGCAGCAGT GGAAACTTGA TTAGAAGTAG GAGAAGATGC ATGGTCTTAA	TTAGAAGTAG	GGAAACTTGA	TTGCAGCAGT	SACGTCTATG
GAAACCTGAG	TGAGAAGCAC TGGTGGAACT AATAGTCACT GAACGTTTTT GAGCAGGGGA GAAACCTGAG	GAACGTTTTT	AATAGTCACT	TGGTGGAACT	TGAGAAGCAC
TGATACACTT	CAGGTGATTC	AAAAAAACC	AATTGTGCAA	AGTAAAGCCT GAAAATCTGC AATTGTGCAA AAAAAAAACC CAGGTGATTC	AGTAAAGCCT
GTAGGTTTGG	TGTTAATAAA TTCAAATTCC CAGACCCAAC TCCTCAAGGG GTCTAATACA GTAGGTTTGG	TCCTCAAGGG	CAGACCCAAC	TTCAAATTCC	гсттаатааа
TGTGGGAGCT	CAACATGTCG GGGGAATCTC AAATTATTGG TAGAGTATGT AGGAAACACT TGTGGGAGCT	TAGAGTATGT	AAATTATTGG	GGGGAATCTC	CAACATGTCG
GCATACTGTG	ATGGTTGGGG CCAGGTTTTA AGGGGTAATA AATGCCATGT AAAGGTATGT GCATACTGTG	AATGCCATGT	AGGGGTAATA	CCAGGTTTTA	ATGGTTGGGG

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ACTCATAGAG GATACATTAA TCCCAGGTCA CTGGGAAATA GATTCTCCTC	ATCATTTAA TTGAGTAAGT ACTCATAGAG AATTGTTATT GTGCAAATGT GATACATTAA TCGGAAGCTG TAGTAGGTTC TCCCAGGTCA ACTCCTATTT TTCTATGGTG CTGGGAAATA TTAATTTTAT CCAATAGCTT GATTCTCCTC CAAGTAACCA CACTAGTTGG CTTGAGTCTT	ATCATTTTAA TTGAGTAAGT AATTGTTATT GTGCAAATGT TCGGAAGCTG TAGTAGGTTC ACTCCTATTT TTCTATGGTG TTAATTTTAT CCAATAGCTT CAAGTAACCA CACTAGTTGG	TAATTAAATT ACTGCCTCCT ACAATCCATTT ACAAATGCCA AAGCAATCAT	TCATATATGG CAATTGAAGA TAATTAAATT ATCATTTTAA TTGAGTAAGT ACTCATAGAG CCCTCACTAT TTGAAAATGA ACTGCCTCCT AATTGTTATT GTGCAAATGT GATACATTAA ACTTAAGCTA TTTTAATAAA ACATCCATTT TCGGAAGCTG TAGTAGGTTC TCCCAGGTCA GATTTGATAA GCCATAAAGA ACAAATGCCA ACTCCTATTT TTCTATGGTG CTGGGAAATA AGAGAGAAAT GTGTAATTCA AAGCAATCAT TTAATTTTAT CCAATAGCTT GATTCTCCTC TCTCTTCTAG CCTTTTAGCT AAGCTGTTAC CAAGTAACCA CACTAGTTGG CTTGAGTCTT	TCATATATGG CCCTCACTAT ACTTAAGCTA SATTTGATAA AGAGAGAAAT
CTGGGAAATA		ACTCCTATTT	ACAAATGCCA	GCCATAAAGA	ATTTGATAA
TCCCAGGTCA			ACATCCATTT	TTTTAATAAA	CTTAAGCTA
GATACATTAA	GTGCAAATGT	AATTGTTATT	ACTGCCTCCT	TTGAAAATGA	CCTCACTAT
ACTCATAGAG	TTGAGTAAGT	ATCATTTAA	TAATTAAATT	CAATTGAAGA	CATATATGG
ATTCCCCCAA	CTTTAAATAG	GGGCCAAAAA	TAGTGGGGAT	AAAGAAGGCA AAGGGAAGAA TAGTGGGGAT GGGGCAAAAA CTTTAAATAG ATTCCCCCAA	AAGAAGGCA
GGTATTTTAA	AGGAATATGT	AATACTCACC	GGGCAAAATG	TGATGTATCA CCCTTGAACA GGGCAAAATG AATACTCACC AGGAATATGT GGTATTTTAA	GATGTATCA
ATCAGTAAGT	ATTCATCCAT GAAATGAACA TTCCGGGGAG ATCAGTAAGT	GAAATGAACA		CAATGAGCAT CACTATTTTC	AATGAGCAT
ACCTGAAATA	GGGGTAAAGC	TCATTTAGAT	AAGCTGCTCA	TCTAAGTTCC CCTACTCATA AAGCTGCTCA TCATTTAGAT GGGGTAAAGC ACCTGAAATA	CTAAGTTCC
ATAACACAAT	GATCTGAATA	TAACTGTGGA	GGCTTTCTAG	AACTTCCTGA ATGTTACTCA GGCTTTCTAG TAACTGTGGA GATCTGAATA ATAACACAAT	ACTTCCTGA

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GTTT CCCTGACCCC ACAGTGGAGA GACTGCATCT GTTAAAGAGC AGTTATGTAA CTAT GCTGAGCTGG GATTCCCAAG GCTTAGGTTC TTTCTGTGAA TGACCTTCAC	CAAGACACCT GAGGTCTGTG TGGAACCACA GGCTTGTCAT	CTGT TTCTTGAGCC CACACTGAGA AAAAGATTAC ATGACTGCAG TTATTTGAAT	GCCTCATGGA AAGACGTCTT ATAAATATTA TAATTAATGT	ATGCAGATCT TCCAAGTATA AATATCAGCT GAGTAAGAAG TCAATCTTCC CTGAAGCAAA	ATTT GTAAATGCGA TTTCTGGGAG CTTATTTTGT AATACATGAT TCCAGAGTGT	CCATAACACA CACAATTGTC TTTTTCCCC TACATGGGCT ATTTACAACA AAATTGGACT	STTT ATTTCCAGGG ATGACTAGAA CTTTAATAAC AAACCTTGGG	TGGCTCATGC CTATAATCAC AGCACTTCGG GAGGCTGAGG CTGGTAGATT ACTTGAGGCC	AGGAGTTTGA GAACAGCCTG GCCAACATGG CAAAACCCTG
ACCACTGTTT C	AGACACCT G	TTCCATCTGT T	CCTCATGGA A	TGCAGATCT T	ATTGAAATTT G	CATAACACA C	TATAATGTTT A	GGCTCATGC C'	GGAGTTTGA G

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FIGURE 16 (96)

FIGURE 16 (97)

ATTAGCCGGG TGTGG	TGTGGTGGCG	CATGCCAGTA	ATCCCAGTTA	TGGCG CATGCCAGTA ATCCCAGTTA CTAAGTAGGC TGAGGTACGA	TGAGGTACGA
CAATCGCTGG AACCT	AACCTGGGAG	GGGAG GCGGAGGTTG	CAGTGAGCTG	AGATTGCACT	ACTGCACTCC
AGCCTGGGTG ACAGA	ACAGAGAAAG	ACTCTGTCTC	AAAAAAAAA	GAAAG ACTCTGTCTC AAAAAAAAA AAAAAAATA ATAATAA	АТААТААТАА
TAAACCCTGA TGAAA	TGAAAGGTTT	CTAAAATGTT	TTCATCTAAT	GGTTTTCTTG ACAATTAAAT	ACAATTAAAT
TTTCTATATA ATGTC		ATAAAAAAC	TGAGAACGAC	AGTTC ATAAAAAAC TGAGAACGAC CACATGTCAT ATCGACTGCT	ATCGACTGCT
TAAAAGAAAA TACGT	TACGTATATT	TACAAACATA	TACACGATAC	TGTCTTTTGT	CTGGTTAGTT
TAGAGGTTAG ATAAA	ATAAACTGCA	GTATGTTGTA	GTGGACAGAT	CTGCA GTATGTTA GTGGACAGAT CATAGAACTA GGAGTCAGGA	GGAGTCAGGA
TGTCTGGATT	TGTCTGGATT CCTAGGAAGC AATGAATAGG	AATGAATAGG	TTGCACGGTG	CAGACCAGCA TCATGAGTAT	TCATGAGTAT
CCTCAGGGAG	CCTCAGGGAG CTTGTTAGAA CTGCAGATCC TTTAACTCAT TGAATCAGAA TCCCTAGGTG	CTGCAGATCC	TTTAACTCAT	TGAATCAGAA	TCCCTAGGTG
TGGGGCCCTG	TGGGGCCCTG AAATCTGTAT	TTTAGCAGGC	TCTCTGGGAT	TTTAGCAGGC TCTCTGGGAT TGTGATGTGC CTTAGAGTTT	CTTAGAGTTT
GACAACCACT	GACAACCACT GGGTAGCTGA TCCTGACTTA GACTTATCAG GCATGTGATC	TCCTGACTTA	GACTTATCAG	GCATGTGATC	TTGAACAAGT

FIGURE 16 (98)

CACATAATCT CACTGAGTTC AGTTTTCTTA TGCTTAAAAT AGGCCCAATA ATATCTATTT	CACATGGACT GCTTTGAGGA TTAGGCAAGA GATCTGTAAC AGACACTGTA GAACAGTGTC	GATCTCTGCT CTGCCACATA	ATAGCTGGTT AACTATGAGC AAGTAATTTA GTTCTTCTCA GTTTAGTTTC TTCACCTGTA	CTATAAAAT CAGTTTAAAT	CTCTTT GTACACTGTA TAAGGACTGT ACATCTAAGG GATTAATGAG	3TT CTATGAACCA	CATGGAAACT CTAAAGAATA TGCACATTTG AAACACAGGT ATCATCTGGG GAAGGTGATC	TGCTCACCCA AACCAGTTCA TGAACATCAA TCTCCAGTGG CGTGCTGGAG CTAGCTGTAC	CAATTG TTTCATTTTT AGGAATTTTG TTTGCTGGTT AAAAATAGTC	ATTATTTAAA ATTAAATTAT GTAAACAATA ATATTAGATA AAATAAGTTA AAATAAAAAC
AGGCCCA	AGACACT		GTTTAGT	CTATAAA	ACATCTA?	TGACTCTC	ATCATCTC	CGTGCTGC	TTTGCTGC	AAATAAG1
TGCTTAAAAT	GATCTGTAAC	TAGTTGCCTT	GTTCTTCTCA	TCTGAAGTGG	TAAGGACTGT	ATAGTAACAC	AAACACAGGT	TCTCCAGTGG	AGGAATTTTG	ATATTAGATA
AGTTTTCTTA	TTAGGCAAGA	CCATAAATGG TAGTTGCCTT	AAGTAATTTA	ATACTCAATT	GTACACTGTA	CATGGAGTAA	TGCACATTTG	TGAACATCAA	TTTCATTTT	GTAAACAATA
CACTGAGTTC	GCTTTGAGGA	TCTGGTCTAC AGCTGACCTT	AACTATGAGC	AAAGAAGGAA AATAACTGTT	GAAGCTCTTT	ACCAGGCTTA TGATTTTAAG CATGGAGTAA ATAGTAACAC TGACTCTGTT	CTAAAGAATA	AACCAGTTCA	GGCCAATTG	ATTAAATTAT
CACATAATCT	CACATGGACT	TCTGGTCTAC	ATAGCTGGTT	AAAGAAGGAA	TATGGGCATT GAAG	ACCAGGCTTA	CATGGAAACT	TGCTCACCCA	CAGCTCATGA GGGC	ATTATTAAA

FIGURE 16 (99)

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AAAGGAACTA ATTATCCCCA AACTCTTCCC CACCTAATTA TTTTACTATC TGTGCCTTGG TICTCTICAT AACTCTACAT AGCCTGATGT CAGGCTAGTA GCTTGAAATT GGCCACAGTG TTCATATATA AATGGTGTGC AGCAAGCTGA CTGATATATA TGAAGAAAGC CACCCCAGGG CATTCCCCAG TGAATGTTTG ATGACATTAG GGTAAGGTGA CCATTICCAC AACTGAGATA CCTGCTGCCT TAAGGAAGGG ACAGGCAAGT CCTTGGGCAG GACCTTAGAT TGTCACTGTC CATCTTGCTC TAGGACTCTC CTTTCCAGGC GGAGTGTGAG CATTTGTACC ATGAGGCTTG GCCAAGGCTA CAAATCCAGA TCCCTCCTGG AGAGCTGTCT GTTAAAATT TACCAACACA CCACTGGTCT TGGATTTGTC ATTATTTTA AGAAGGACTC ACATTACCCA AGTGCAAAGC TCCATATGGT GACAATACTA CTTAGAAACC CTGACCTAGA TAATTTACAG TTGCACATTT ATTGATTTTA AGTCCAGGTT ATCAATTTAT GGGAAGGCAA AAAGAGCTAG GGATAGAGCC GATTATTAC AATTTACCAC CCTTCAGAAT CACAGAATAT

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ATGACGATGG	ATGACGATGG CCAACTCTGT CCTCCTACCC TACTGATGGG ATTATCTTTT	CCTCCTACCC	TACTGATGGG	ATTATCTTT	CTTGACACAT
GGCAATGCCT	GGCAATGCCT CCAATCAGAG GCTGGTAGCT	GCTGGTAGCT	ATTTTTAATC	TTCAGGGCAG	TATTTTCAA
AGGGAAGTTC	AGGGAAGTTC ATGGACCATA TGCATCTGTA TCATTTAGAT GTATATTAAA AATGCTTAGT	TGCATCTGTA	TCATTTAGAT	СТАТАТТААА	AATGCTTAGT
CTTCCCCAGT	CTTCCCCAGT TATACTAGAT	CAGAATCTCT	GTTGGTGGGG CCCACGAATC GGTATTTTCA	CCCACGAATC	GGTATTTTCA
ACAAATCACT	ACAAATCACT AGGTAATTTC TGTATATACT ATAGTGTGAA GACCACTGCT TGAAGGTTTC	TGTATATACT	ATAGTGTGAA	GACCACTGCT	TGAAGGTTTC
TTTGCATATC	TTTGCATATC TCCACTAAAT ATAAAAATA	АТАААААТА	TTGACTTCTA GATTTAACTC		CCAAAGCACT
TGCATTTTTA AGTTT	AGTTTCTGGG	GGCATTATAT	CTGGG GGCATTATAT TGTGGTACCC CTATACCACT CACACTCTAG	CTATACCACT	CACACTCTAG
TCAGGAGGTA TATTA		TGGAC TGAATGTTTG	TGTCCCTCCA AAACTCATAT GTTGAAGTCT	АААСТСАТАТ	GTTGAAGTCT
TAGCTTCCAA TGTGA	TGTGATAGTA	TTAGGAGATG	TAGTA TTAGGAGATG GTGCCTTCTG GAGGTAAAAT CAAGCCCTCA	GAGGTAAAAT	CAAGCCCTCA
TGAATGGGAT	TAGTG	AGAAAGAGAG	CCTTT AGAAAGAGA CTCCGTCACT GTCTTTCCAT CAATTGAAGA	GTCTTTCCAT	CAATTGAAGA
TGCAGTGAGA	TGCAGTGAGA AGCTGGTAGT CTTGCATCTG GAAGAGGGCC CTCACACAAC CTGATCATGC	CTTGCATCTG	GAAGAGGGCC	CTCACACAAC	CTGATCATGC

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AAAGAATTAT	CCAGAGATGC TGTTAAACAT CCCGCAAAGC ACAGGACAGT CCCCGACAAC AAAGAATTAT	ACAGGACAGT	CCCGCAAAGC	TGTTAAACAT	CCAGAGATGC
TGGGTGGAGA	ATGAGTGGGT GGGTTGCTAC TGGCATCTAG TGGGTGGAGA	GGGTTGCTAC	ATGAGTGGGT	TTATTTGTTA TAGCTGGGGG	TTATTTGTTA
GGAGACGTTT	GGGTCTTAAC CAGGAGTGAA TTTGACTCCA GGGAACAGTT GGCAATGTCT GGAGACGTTT	GGGAACAGTT	TTTGACTCCA	CAGGAGTGAA	GGGTCTTAAC
CTAGCTCGGT	AAGAATCATT	TTATCAGAGA	GACTGGCACA TTATCAGAGA AAGAATCATT	AAGAAGCAAA AGTGAGTACG	AAGAAGCAAA
TTTCATCTCT	AAGGGTTTGC	ATTGAAGAGC	GTGTATACAG	TGCTTTTCTG TGAAATCTCA GTGTATACAG ATTGAAGAGC AAGGGTTTGC	TGCTTTTCTG
GAATGGAATT	AGAGGCACGA GAATGGAATT	TGGCAAAAAT	TTATCACTGG	TCATGAAGGG ACCATTATCA	TCATGAAGGG
TCAATCTCTT	AGCCACCTTT	TCAGGCCAGT	AACCCTGACT	GTTGAGGAAA ACTAAGTTCT AACCCTGACT TCAGGCCAGT AGCCACTTT	GTTGAGGAAA
ATGTATCCCT	GTAAGTACAA ATGTATCCCT	ACATCAGACA GTGTAGCTAT		GAACTAAGGC AAGGGAGACT	GAACTAAGGC
ATAGCAGCCC	TTTTCAGGGC AAAAACTGCA ATTACTTTTG TGCCAACCTA ATATTTTGTT ATAGCAGCCC	TGCCAACCTA	ATTACTTTTG	AAAAACTGCA	TTTTCAGGGC
TTGCCTTTAC	TTTGTGATTT	CTGCAAAGTA	TATTAGGTTG	ATACCCCACC CAGGCTACAA TATTAGGTTG CTGCAAAGTA	ATACCCCACC
TCTGTTGTTC	TCTGCCTCCA GAACTATGAG ATGATAAATT TCTGTTGTTC	GAACTATGAG	TCTGCCTCCA	TGGCACCTGG TCTCAGACTT	TGGCACCTGG

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FIGURE 16 (101)

FIGURE 16 (102)

CTGGCCCCAA ATATCAATAG TGCCAAAGTT GAGAAACCTC ATTCTAGCTT CCTTTTCCCT	TCTACGTTCT AATCAACTGT TGTTCTTTCA GCATTAGGAT TCATCCAGCA GTCTCTTTCC	TTTTAAAAAT GGACTCATTT TAGTGTCACA AGAAAAAAT	T TTAATGATGT TTTGCCTTTC ACATAGCAAA	TTTTTA AATAAAATGG TGAATAGATC AAAACATTAA TTTCACATGT	GTTTTAATAA ATAACAGGAA GATGGCTATA TTATATAAAT TGTTCTTGTA TATGTCTTGA	T GCCTTTTCTT GTGAATAGAT CTAATAAA	CGCTCTTCTA AAAACAAATT AAATGGATAT TATTTGCTGA GAATGTAATG CTTGTGTGAA	TAGAAGCCAG CCCTGAATCC AAGCCCCCAG ATCTATTTAA AGAATTTGAA GAATGTCAGA	AAAGCACGTG GCTTCAAGGT TAATGTGTAAA GACTCACAGA AACTTGAAAA ATCACTATGA	CTAAAAAGAA AGTATGAGCT CCCTGCATGC CTGTAAATTG GAATGACAGC CAAAACCAGT
ATATCAATAG TGCCAAAG	AATCAACTGT TGTTCTTT	CCAGCAATTT GTTGAAATTT TTTTAAAA	ACATTCACAG GAAAGGATGG GTCATTTTGT	AGTATTTTA AATAAAAT	ATAACAGGAA GATGGCTA1	GTGGATCATC AAACACAAAC GTATCTACAT GCCTTTTCTT	AAAACAAATT AAATGGAT?	CCCTGAATCC AAGCCCCCA	GCTTCAAGGT TAATGTGT	AGTATGAGCT CCCTGCATG
CTGGCCCCAA	TCTACGTTCT	CCAGCAATTT	ACATTCACAG	AGCTTAATAA AGTA'	GTTTTAATAA	GTGGATCATC	CGCTCTTCTA	TAGAAGCCAG	AAAGCACGTG	CTAAAAAGAA

FIGURE 16 (103)

CAAGTAGCAT	AATTTGCTTT	CTTCCATAGT	TGATTCAGCT	TTGAATACGG	AGCATTCTAA	TTGTAATAAA	GGTTGGTCTC	CCACCAGTGC	TCTAAAAAGG	TGAATAATTC
TTTCTTCTC CAAGTAGCAT	ATAGTCAATA ATCCTTAAAG AGAAGCAAA GAAGGGGAAG CACTGAACCA AATTTGCTTT				GCTGGGTAAA ACAGGGCTGA GACCTACTGG GCTGCATTCC CAGGAGGCTA AGCATTCTAA	CAGGAG GTCAGCACAA GACCTTGCTG ATAAAACAGG TTGTAATAAA		GCTAAT TATAATGTAT TAGCATGTTA AAAGACACTC CCACCAGTGC	TIGGCAACTT CCGGAAGTTA CCCTCTATGG TCTAAAAGG	
TTCAAATTTG	GAAGGGGAAG	TITGIACCIG CICAGCICAA AIGCAGAGIT CICIACCIGG AAAITGACIG	TTGATAGCCA CAGAGATG GGAACAGAAG GAGAGGTATA ATCCCAGACT	CAGAGGCCTT CCAACCAGAG CGACTCCATC	GCTGCATTCC	GACCTTGCTG	CCCACC AAAACCAAGA TGGCCATGAG AGTTATCTGT	TAGCATGTTA	CCGGAAGTTA	CTCCCA GAATTGCCCA CCCCTTTCCT GGAAACTTG
TTAACAGGTT	AGAAAGCAAA	ATGCAGAGTT	GGAACAGAAG	CAGAGGCCTT	GACCTACTGG	GTCAGCACAA	AAAACCAAGA	TATAATGTAT	TTGGCAACTT	GAATTGCCCA
TAATTATAAA AACAGCTAAT	ATCCTTAAAG	CTCAGCTCAA	CAGAGAGATG	ATAGAGAATG ACAATAGTGT	ACAGGGCTGA	GAGACAGGAG		GTATGCTAAT	TACAGGTACA	TCACCTCCCA
тааттатааа	ATAGTCAATA	TTTGTACCTG	TTGATAGCCA	ATAGAGAATG	GCTGGGTAAA	GTCACAGGAT GAGA	GAAGCCAGCC AAAA	ACTGCTCATT GTAT	TATGACAGTT TACA	GGAGGAACCC TCAC

FIGURE 16 (104)

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GAAGCTCAGG	TAAACTTGCT	AGAACTCTCT	CAGGGAGACT	ААСАТААААТ	ААТТТСАТТА	GAGCACTGAG	GATCTCCTCA	GTTTGCCAGT	ATCTCCTCAT	AGTAAATTGA
CCTTAGGCCA GAAGCTCAGG	ACTTTCTTAA	AAGAGATCCA	AGTAAGGGGT	TCATTGTCAT	TTCAAAATTC	ATTTGTTAAG		TGTTTAGCAT	CTGTATCATA ATCTCCTCAT	GTTGAACAAA
СТGТААGТАТ	TTTATCCTTT	TCTTTCTTGC	TAACAATAGT	AGGGTCCTCA	TAGCTGATAG GATTAGAAAT TTCAAAATTC AATTTCATTA	AGGCCAAACA	GCAGAGTATA	CCTTTCTGAC	GTCATTTCCA	GTAAATGTTA
CAAGAAGTAA	TAGCCATTCT	CCCTGTGAAT	CTCTTTCCAG	CCTTAGATAA	тасстсатас	ATGGCCAGAG	AAACCTCTTA	TCCAGGGTAC	TTAAATATCT	CTTGAACTCA
ACCCTTGTTC AGCATATAAT CAAGAAGTAA CTGTAAGTAT	ı CCACTGCTCT GAATGTGGAA TAGCCATTCT TTTATCCTTT ACTTTCTTAA TAAACTTGCT	TTCACTTTAC TGTATGGACT CCCTGTGAAT TCTTTCTTGC AAGAGATCCA AGAACTCTCT	CTTGGGGTCT GGATCAGGAC CTCTTTCCAG TAACAATAGT AGTAAGGGGT CAGGGAGACT	GGACAAAGGA GTTTAAGAAG CCTTAGATAA AGGGTCCTCA TCATTGTCAT AACATAAAT	CATGGACTCC TAGAATTTTA	ATTTTCATCT GCGAAAACAG ATGGCCAGAG AGGCCAAACA ATTTGTTAAG GAGCACTGAG	GGCAGACCAC ACTGGAACGC AAACCTCTTA GCAGAGTATA CAAGGCCTTT	GTCAGAATGA ACTAGAGCTT TCCAGGGTAC CCTTTCTGAC TGTTTAGCAT GTTTGCCAGT		TCATCTTCAA TCTCCAATGC CTTGAACTCA GTAAATGTTA GTTGAACAAA AGTAAATTGA
ACCCTTGTTC	CCACTGCTCT	TTCACTTTAC	CTTGGGGTCT	GGACAAAGGA	CATGGACTCC	ATTTTCATCT	GGCAGACCAC	GTCAGAATGA	CTGACTAATT TTGAAGTTGC	TCATCTTCAA

FIGURE 16 (105)

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GTGTGGGAGG ATATTGGAAC CAAGTTTCAA GTCTTCAGTG AAGAATCAAG GGAGAAGTTC	TAAAACCTAA CAATATCCCT CTGGATGGAC ATTTATTTTA TTACTACAAT AAGCCACACG	CATTCTTCTA ATATGTCTCT ACTGTATTTA GAATCTGATA	AAGCCCCTAT TAGAATTCAT CTCTTTAAGA ATAAAAGAAG CTGAGGAACT AAAGAGAGG	TTGGAATAAT CCACTAATTA TATCCGTTAA GCTTCAGTTA CGCTAATAAG GAATATCACA	TCTGAACAGT AAAGTACATG AGGAAAGATA AGATTCAGGG	CTGAAATGTC CTTCAGCATA TGTAGGTAGT GGTGATGAAA GTCATTAAAA GAAAATTGA	TTGAGGTATT TTAGTAAACA AAAGAACTCA CCACTTACCC ATCAGGAAGT GTATTGTTAA	TGCAGTGCTG TTCAGCCTTC TGGAAGAAAA GGTTTCTTCA TGCTTCTCTC TTTAGCCTAA	GTCACTTTTC AGGCAAAATT AAAAAAAAA AAAGATTGAA AACGATGCTC	TGCTTCAAAA GAAACAGGCT GTTGCATTGT GCTTGGAACA GTTTACTCTT
ייייייייייייייייייייייייייייייייייייייי	TTACTACA	ACTGTATT	CTGAGGAA	CGCTAATA	AGGAAAGA	GTCATTAA	ATCAGGĀAC	TGCTTCTC1	AAAGATTGA	GCTTGGAAC
) 	ATTTATTTA	ATATGTCTCT	ATAAAAGAAG	GCTTCAGTTA	AAAGTACATG	GGTGATGAAA	CCACTTACCC	GGTTTCTTCA	AAAAAAAA	GTTGCATTGT
	CTGGATGGAC	CATTCTTCTA	CTCTTTAAGA	TATCCGTTAA	TCTGAACAGT	TGTAGGTAGT	AAAGAACTCA	TGGAAGAAAA	AGGCAAAATT	GAAACAGGCT
	CAATATCCCT	GTGAGTCATA AGGAGCATTT	TAGAATTCAT	CCACTAATTA	TGACTGTGGT GTGTGCTTGT	CTTCAGCATA	TTAGTAAACA	TTCÁGCCTTC	GTCACTTTTC	TGCTTCAAAA
)))))	TAAAACCTAA	GTGAGTCATA	AAGCCCCTAT	TTGGAATAAT	TGACTGTGGT	CTGAAATGTC	TTGAGGTATT	TGCAGTGCTG	TTCTTATCCT	CTATTTTATT

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AATCCACCCC	AAATCAGTTG GAGAGTATTT TCAAAGATAA ATGTTAGTGT GCTATGAATG AATCCACCCC	ATGTTAGTGT	TCAAAGATAA	GAGAGTATTT	AAATCAGTTG
TATATATTGG	TTTCACCCTT GACAAGAGTA	TTTCACCCTT	TTATTAAGTA	GGGGGAAATC AGTTTTACAA	GGGGGAAATC
GGAAGAGGTA	TATATATTTA ATATATCT GTGTGGGATA GGAAGAGGTA	ATATATATCT		ATATATATGT GTGTGTATTA	ATATATATGT
ATATCTATAC	TAAAAATATC ATAGTCTGAA ATGAATGCCA GCACACCATA CAGGATTTAA ATATCTATAC	GCACACCATA	ATGAATGCCA	ATAGTCTGAA	TAAAAATATC
CTGAAGACAA	TTGCCTAAGA CTGAAGACAA	AATGGAAGTT	AAGATATTAA	ATTCTTGTGA ACATCAGTAT AAGATATTAA AATGGAAGTT	ATTCTTGTGA
GAACTAGAAC	TATAGATCAA ATACCTGACA TATATATGCA TTCTCTGAAG TCTTAGGGCA GAACTAGAAC	TTCTCTGAAG	TATATATGCA	ATACCTGACA	TATAGATCAA
ATCTATAACT	TATACTGAGG ATCTATAACT	ACTTTTGGGT	CATTTGTATT	TTTGAATTTA CCAGCACTCA CATTTGTATT	TTTGAATTTA
TCTTTTACAT	TCTTTTAATT TCTTTTACAT	GCATTACTTT	CCATGG TAGCTTGTAG GCATTACTTT	AGAACCATGG	TGACAATAGC AGAA
TTGCTTAATA	TGATACTGAC TTGCTTAATA	ATATTTTCTT	TTCACA TGTTCTCAGC ATATTTTCTT	GCAGTTCACA	AATAATTTCT GCAG
GATAAAAGTA	AGGAAATACA GTGTTAAGAA AATGAACAGG CATGAAAACC ATGGCTATTT GATAAAAGTA	CATGAAAACC	AATGAACAGG	GTGTTAAGAA	AGGAAATACA
CTGAAGAAGC	GGCCTTGATG TAAGTGTGTAA AGGAAGCCCA TGTAATTGAC TAGGCAGTAT CTGAAGAAGC	TGTAATTGAC	AGGAAGCCCA	TAAGTGTGAA	GGCCTTGATG

FIGURE 16 (108)

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TACCACCACT GAGGCAGGGT AGGAGAGGCC TGTGCTCCTC AAGCATAGTT GGAAAAGGAC GGCTGCTCTG ATCGTGGAGT GTCTAAGAGG TCCCTGGAAG AAGAAACACT CAGTAGGAGA GAAGCTGGAG GTACCTTCAG TGCTGAATTG TCATTCCCCC GTGGAGCAAA TTACATAGGA AAGATGCCCA GTGATGGAGA GTGGGGGTGT CTCTAACAAT TACCCACCCA CCTGCCCCCA CCCCTAAGAA AAAGAAATC ACATACAACC AGTCAGCTGT AAACATATGC CGAGCCTAGT AAACTCAGAT ACTAAGTTAC CAGGGTACCT GGCAAGTAAG AACATTCCTG ATTCCCTTCC CTCCTCTTCC TCTTTGCCCT TGGCTAGCAA GATGGGGAGA GGAGGAGAAG CTGTAAGTGG GGAAAAAAA CTCCTTTTCA GCTGCTGGAT TCTCCCTCAT CATAGGCCTG AGCTGGGGAA TTGCTTAGGG CTTAGGGCTA TGACTCACAG CTAAGTCAGG GAGACAGGTT CTCAACAAGA CCACTTCAAG AGTCTAATGT GTGGAGACTG CCAAAAGATG GCCTGCACTG AAAAGCCTCA TGAGTGTTGA GTCTAGCTTC SAACCTAGAT CCAACCTTAG GCAGCTTTCT

FIGURE 16 (109)

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TAAATTTTGA CAATGTTGAG ATTAGATATA CTAATTATTA AACTAAGATT ATGTTTTGCA TGTAGACTGG TAAAACATTT GCTTGAAGTG ATAAGAAAA CCTCTTATCT AAGAGCATCC AGGAAAGTCG GGGGTTTCCT TATACCTTGT TTATCTTACA TTTTTCCCAT TCCTTTTTCA AAAAGAAAGC TITITICITI CGAATITCAC AAATIAATIT ICCTIGGAAC CITITIGGITT GGGCTTIAAG TTCAAATCTA TCAAATGACA AGCTGGATTT AGTTTAGGCT TTCATCACAA AGAGAGACA GCCTTGAAGA TTAAAGTGTG TGGCTCTTCT TTAGTCCAGC AAAGGATTCT ATGCATATTT GGGCTTCCTT CTGTCTCATA TCAGGAAGAA GGATTCTTTT TAAAACTGAA GTAACGTTAT CATTTAATTT GCCTTCAGAA ACTTGGTTAA TGTAGGGGTT TCCTATGCAG ACTTGGGGAC GGATTTAAAG TATTTGCATA TGGAAGTCAG CTTTCAGAGA TGTAAGTACT GAATTATGGT ATTCATTATT TCAGCTAGCA TGAAAGTTAA ATTCAAAACG TAATGGGTAT TTAAATCCTT STGGAAGAGA GAAAATAAGA GAACATCCTT GTGCATATCA CAAGATGTTC SUBSTITUTE SHEET (Rule 26)

FIGURE 16 (110)

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AGAGTTATAA	GAATCTTTGG	TTTCATCCCT GAATCTTTGG AGAGTTATAA	TAGGCAATGT	AGAAATTTTA AAGGAAGCTC TAGGCAATGT	AGAAATTTTA
GGAAAATTGT	ATTATCAAGG	TTGTCCTCAT	CACAGTTTCC	TGGTTAAATA ATTTGTTATT CACAGTTTCC TTGTCCTCAT ATTATCAAGG GGAAAATTGT	TGGTTAAATA
CCATTCCCTT	TGCAAAGAGG	AACTTTGTTT	TTTTATTTTT AACTTTGTTT TGCAAAGAGG CCATTCCCTT	ATGAAATCTT TAAGCTGTAT	ATGAAATCTT
TTGTATCGTT AACCAAATAT	TTGTATCGTT	AAAAAGTGTG	AATGAAAGAA	TCTTTTTTA ATTACACAGA AATGAAAGAA AAAAAGTGTG	TCTTTTTA
AGGACCTATG	ACATGACACC	AAGTTTTTCT	AGAAACTTTG	TGTTTCTTCT TCTCCCTCCC AGAACTTTG AAGTTTTTCT ACATGACACC AGGACCTATG	TGTTTCTTCT
TCCCACAGAT	GAATTTTTT	ACCTAATCAT	CAAAGTCCTC AAAAACCTGT ACCTAATCAT GAATTTTTT	CAAAGTCCTC	ACTTCGTTTT
TGTATATTTC AAAATGTGAA TGTCAGCAGT CAGAAAATAG TATTTTTTA	CAGAAAATAG	TGTCAGCAGT	AAAATGTGAA	TGTATATTTC	CTAAAGAAAG
TTCTCCTGCT	ACAGTTTTT	TTTGTGTAAA	GTTGGCAATC	AAACAGATCT GTACAATAAG GTTGGCAATC TTTGTGTAAA ACAGTTTTTT	AAACAGATCT
TCATTTGACT TAAGACACAT CATTTCCTCA TGGAAGTGTT	CATTTCCTCA	TAAGACACAT		CATGATATGA CTGTAGAAGC	CATGATATGA
AAGGAAGTTT	TTTTATATCA	GAGGATACAG	GTCAAAAATA	CTTCCATGGT TGAAGGACAT GTCAAAATA GAGGATACAG TTTTATATCA AAGGAAGTTT	CTTCCATGGT
AGGAAAAATT	TTTTTTAA	CTGTAAGATT	TATTC TATTTATATT CTGTAAGATT TTTTTTAA AGGAAAATT	CTTGA	ACCTGTATTT

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FIGURE 16 (111)

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AAACAAACAG ATTACTGAAC CTGTAAGAGA ACCAATCGTG AAGTCATTAC ATCTAAGCAT AAGCAAAATC TCCTCTTGGA TCATTAAGTT ATAGAAGAAA AGAAAGCCTG CACTTTGAAA CTTCTCTGTG TTAAAACTAT TTTTGTTTTG AGAAGGAGTT GCCCAGGCAG GAGTGCTGTG GCACGATCTC AGCTCACCGC AACCTCTGCC CTTGCCTCAG CCTCCTGAGT AGCTGCGATT ACAGGCGTGC TTTGTATTTT TAGTAGACAC AGGGTTTCAC CACGTTGGCC AGGTTGGTCT CGAACCCCTG ATCTCAAGTG ATCAGCCCGC CTCGGCCTCC CAAAGTGCTG CCTTATTCGC ATACAATTTA AAAATCATCA TTGTAAGTCA AACACGTAAA ATTTTACAAT TTAAAGCTTC GTAGGCGTTT AAGAAGAATG AATCAACAAT TGAGTTTAAT AGACTTCTCA CATTCCAAAT TTATTCATCT CCCTTATTCA CATATATTTG CGTGAGCCAT CACTTCTGGC GCTTGGTAAC TACAATAGCA AAGCGATTCT CCGGCTAATT TTTAAATAAA CGATAGCAGT CTAATAGAGA TCCCGGGTTC CTGCTCTGTC AATGTGTTTT GCCAGCAACC GGATTACAGG

FIGURE 16 (112)

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GGCCAACATG	GGGAGGCCGA GGTGGGCAAT CACCTGAGGT CAGGAGTTCG AGACCAGCCT GGCCAACATG	CAGGAGTTCG	CACCTGAGGT	GGTGGGCAAT	sggaggccga
CCAGCACTTT	CAATAG GTCCGGGAGT GGTGGCTCAT GCCTGTAATC CCAGCACTTT	GGTGGCTCAT	GTCCGGGAGT	ATGACAATAG	TTTATTTAAA ATGA
ATCCTGCCTT	GTAAAT ATAACCATGC ACATACACAC ATATTTGAAT ATCCTGCCTT	ACATACACAC	ATAACCATGC	TTTTGTAAAT	ACCTTCTTTT TTTT
TTTTTCTAAT	CCTTCCATTG	AGGTGAATTT	CTGTTG GCAATGATTT AGGTGAATTT	ATAGCTGTTG	AGACAGAAAC ATAĞ
AGCCTAGATC	TAGTTCGTAA GGCAGGTGCC CTACTGAGTG AGCCTAGATC	GGCAGGTGCC		CCAGACTTCT CTCTGGGCTT	CCAGACTTCT
TTCAAAACCA GCTCCAAGCC		TAACAACTGG AGACAACTCT		TTGCCTTCTG	TCCCTGACTC TTGC
TTGCTCTCAC	GGAACTGGTT TCTTTTATCA GGTTAAGTGA TTAGTTCTCT TTCCCTCTAG TTGCTCTAC	TTAGTTCTCT	GGTTAAGTGA	TCTTTTATCA	GGAACTGGTT
TCAAGTCCTA	TTGTTTCTGT	ACTTTGGGCT	TCAACTCTTG ACTTTGGGCT	TCCTCTCCTC CACCTTGTTC	тсстстсстс
CCCTCCCACT	CACAGAGGGA GGTCTGGGCA ATCCACTCTT GGTCACAGGA AAGCCATTGA CCCTCCCACT	GGTCACAGGA	ATCCACTCTT	GGTCTGGGCA	CACAGAGGGA
TTTACTGAGC AGTCACACCT	TTTACTGAGC	TCCTCAGGCC CAGGCCTCAA		TCCTTCAAAT CTGTGCCTTT	TCCTTCAAAT
CCCAGCGATC	CAGAAGGTTT GAAAGAAGGA AGGGGCAGAA AATTACCTAC TTTTCCTCTC	AATTACCTAC	AGGGGCAGAA	GAAAGAAGGA	CAGAAGGTTT

FIGURE 16 (113)

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CGAACTACCC	TITCCATICI ICCIGAIGCC AITCAITIGA CGAACIACCC	TCCTGATGCC	TTTCCATTCT	TTTTATACCG ACACTCCTGG	TTTTATACCG
TCAATGAGGC	GACTAAAGCT GGGTCATTTT AATTAACACC TGTACCCCAA AGAAAGACTG TCAATGAGGC	TGTACCCCAA	AATTAACACC	GGGTCATTTT	GACTAAAGCT
GAGCAGAAGA	GGTTGGAGAT GAGCAGAAGA	TATCACCCCA CTCAAGGCTT	TATCACCCCA	TTGATCACAG	AATTACCGTA
ATCTTCAGAT	TTGCCTCACC AGAGGTAGAC AGAAGACCCA AGCCAGGCCA GTTACACACA ATCTTCAGAT	AGCCAGGCCA	AGAAGACCCA	AGAGGTAGAC	TTGCCTCACC
ACTCCCCATT	CTGGATGGAA CTGTTGATCA CAGTGTTTTC	CTGTTGATCA	CTGGATGGAA	ACCCACTCTT TGCATGGGTT	ACCCACTCTT
GGGAAATGCT	CTTTCTTTA GGGAAATGCT	CAGCACCTCT	TCTGCCCACT	AAGTAGCAGA CACCTGTCAT TCTGCCCACT CAGCACCTCT	AAGTAGCAGA
CCATTCTGCC	ATTTATTTGG	ATTAATAATA	GTCAATATAT	CAATAAAATA GTCTGAAATT	CAATAAAATA
ATGATTAAGA	AAAAAAAAA AAAGACAGGA TAAACATTCT AGATAGTCTC TATAATGGTC ATGATTAAGA	AGATAGTCTC	TAAACATTCT	AAAGACAGGA	AAAAAAAAA
CTCATGGAAA	CAATAAGAGC GAAACTCCAT		CCAACCTGGG	TGAGATCTTG CCATTGCACT	TGAGATCTTG
TGCAGTGAGC	TACTCAGGAG GCTGAGATGT GAAAATCGCT TGAACCCGGG AGGTAGAGGT TGCAGTGAGC	TGAACCCGGG	GAAAATCGCT	GCTGAGATGT	TACTCAGGAG
GGCTCCCAGC	GTGAAACTCC ATCTCTACTA AAAATCAAAA ATTAGCCGGG CATGGTGGCA GGCTCCCAGC	ATTAGCCGGG	AAAATCAAAA	ATCTCTACTA	GTGAAACTCC

FIGURE 16 (114)

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AAICIIICCA ACAGIGICII IGGAAGAAA AIAGICAGAA AAGAAGAIAG AGIIGIIIIC TGTTCTTTGC AACCAAGGAA CTCTAAATGA TAGACTTGTT GCTAGGCACT TTGGTTATTT	TTATTATCTT GAATACTTCT GTGATATACT TCTTTGTGCA TGCCTGTTTG TACGGATGTA	TATTTTTATAT AATTTCTCAG AAGTGGAATT ACTTTAGTCAA AAGGTATGAA ATTCTTAATA TAAATTGTGC AAATGCTTTT TAAGAGGATT ATACCAGTTT	ATATAA CAGAAAGTAC TACTGAAAAA ATATTACAAA AATTTGTCTC	CCTTGT AATAGATGAT AAAGTACTTG AAATAGGAAC ATAGAGCATT	TTGGGTTATT TACGGAATCC TTAGAATTAT GGCCAGACAT	GTTACATAAA TTGCTTATTC AACTGGCTTA	AATCTATAAT AGAAAGATGA CACTTACTGA ATGTTTAATA TACACTTTGT CAGGGGCTTT	CATCTT CAAAATGACC CTACTTTCCT ATTTTATAAG TAAGGACAGG
GCTAG	TGCCT	ACTTAGTCAA TAAGAGGATT	ATATT	AAATA(TTAGA	$ ext{TTGCT}$	TACACI	ATTTZ
TAGACTTGTT	TCTTTGTGCA	AAT"TTCAG AAGTGGAATT TAAATTGTGC AAATGCTTTT	TACTGAAAAA	AAAGTACTTG	TACGGAATCC	GTTACATAAA	ATGTTTAATA	CTACTTTCCT
CTCTAAATGA	GTGATATACT	AAT"TTCTCAG TAAATTGTGC	CAGAAAGTAC	AATAGATGAT	TTGGGTTATT	TACCAA ACCTAGGTTG	CACTTACTGA	CAAAATGACC
TGTTCTTTGC AACCAAGGAA CTCTAAATGA TAGACTTGTT GCTAGGCACT	GAATACTTCT	GCTTTTTTTATA TATTTTTATAT CATTTTTCTG ATTCTTAATA	TTATATATAA		AATAATTTCA	\mathtt{TCTG}	AGAAAGATGA	ATGACATCTT
TGTTCTTTGC	TTATTATCTT	GCTTTTTTATA CATTTTTCTG	ACATTTTGTG TTAI	TCTGTTCAGG AGGA	TTCAGTTTAA AATA	TTATAGATGA	AATCTATAAT	GTATTATTCT

FIGURE 16 (115)

AGCAGAGTGA	TAACCTGGAC	CACTGTACTC	GTGATTGCAC	GTTTCAAGGT GCAGTGAGCT GTGATTGCAC CACTGTACTC TAACCTGGAC AGCAGAGTGA	GTTTCAAGGT
TAGTCCAGGA	ACACACCTGT AGTCCCACAT ACTCAGGAGG GTGAGTTGGG AGGATAACTT TAGTCCAGGA	GTGAGTTGGG	ACTCAGGAGG	AGTCCCACAT	ACACACCTGT
GTGTAGTGGC	GCCTGGGCAA CATAGTGAGA CCCCTTCTCT ACAAAAAAA AAGCAGCCAC GTGTAGTGGC	ACAAAAAAA	CCCCTTCTCT	CATAGTGAGA	GCCTGGGCAA
TTCAAGACCG	TTTGGGAGCC TGAGACAGGA GGATCACTCG AGGCCACGAG TTCAAGACCG	GGATCACTCG	TGAGACAGGA	TTTGGGAGCC	ATGCCAGCAC
ТАТТССТАТА	CTGACTGCTA TTAGAGGTCA TAAAGAATAT TGGGGCCAGG TACATTGGCT TATTCCTATA	TGGGGCCAGG	TAAAGAATAT	TTAGAGGTCA	CTGACTGCTA
ATGAATGTCT	TGTTAG CGTGATTACT TAGATCCCTG AACACCATGG ATGAATGTCT	TAGATCCCTG	CGTGATTACT	CAAGTGTTAG	GTACAGATGT CAAG
GAAGAGTGCT	GTCCTA AGATTTCGTG AGGCACATAG AGATAGTGTG GAAGAGTGCT	AGGCACATAG	AGATTTCGTG	CTATGTCCTA	CTTGCTCTAC CTAT
AACAATAATA	TTTCTAATCT TTAAAACTAA AACAATAATA	TTTCTAATCT	GAATCTTCAT	CAACGTCTTT	GGAATTCACT CAAC
ACAAACTTGA	TAAGGTTAGA AAGCCAGATT GGAGTCCCAA TTTCACCACT TAGTAACCAG ACAAACTTGA	TTTCACCACT	GGAGTCCCAA	AAGCCAGATT	TAAGGTTAGA
CTACAGAACT	TTCTAAAACT GCATCTCGGC CATCTTATTC	GCATCTCGGC		TAAACCTGCA	ATAAGGCTTT
ACCCAAATCT	ATGACT AATTTTCCCA AGGGCTGTAC CAAAGCCAGA ACCCAAATCT	AGGGCTGTAC	AATTTTCCCA	GAACATGACT	AAGGCTTCAA GAAC

FIGURE 16 (116)

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GACCCTGTCT CTAAAAAAA AGAAAAAAA ATAATAATAA TAAAGAATAA TGGGGCCTTG CGTGGCCACA CTTCCTCACC CAGTCACTGG GAGGTGGATG CCAGCTGGTC TCCTAAGTAA ACAATCACGT AATTCATTCG GGACAAAGCC AGAGAGGTGG ATATGCATGT TTTCCTCCCA AGTTTTCCT GGAATTCTTT ATGGGAATAT TATTGGTAAT CTCCTACTTG TGCATATGAT ATTGTCAACT TTGTCATTCC TTACTGCATG GTTGAGTTAC GGCTTACTTG GCTACTCCAA AAAGCAGAGC ACCAAAGGCA CTCGTTCTGC TCCCCAGCTC GGATACCCAC TCCTCTTT CTGCTCTGAG TTGTGAAGCA ATTGGAATGT TGACAGGGTG AGAAGACAAA CTCTCCCACA GAACAACCTC TTCCCTTTAA CAGTGAAGAA ATTTCCTCAG TATCAACTGG CATGGGGAGT CTGTGGCTGC TAACACTTCC CACTCTGTGT AGGTTGAAAA TGTGGAGAAA GAGAGGCCAG CCGAGAACAG GGAATAAGAC ATGGAACCAT TTACAAGGAT ATGAGCTTCG CAGAGCTGGA CCAATGGATG AGGTCCCCCT GCTGAGTGGA AAAAAGTCAA GAGGTTTAGG AGGAAATCGC

FIGURE 16 (117)

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ACACCCACTC CTTGACGCCC TACCATGTGG TCATAAGACT CCCTTTAAAG TGTTCCTTTA	TTCTATAAAA TACAGCTCAA TGTCAGAACC CTTGTCTTGT	CT TATTCTCTCT ATTTCCCTGT	AGGGTCCCAT CCAGGCCAAA GTGAGTGCCA GCCTCATTTG GGCAGCAGAT GCCCTGTGGA	TT AGCTGTCATG GATGCCTGGT	CCTGTCAATA GCGCTCAATA AAGCCAGAAG GCCAAGCGTT CGCTTCTGCA TACTGATTGC	TCTAGGCAGT CAATTTTAGA ATATTAGTCT	TGGTTCTTAA GTGGTTAAAA TCCCTAGCTG GTCTTTAATC TGAGCCTGGA GAATTTAGTT	PA TATGTCTTTC CTCCATCTCT	TAGATCCCTG AATCATAGAG ATATATGT TATATAATCA ACTGTCTCCA GTCTCTAAGA	GTGATAAGTA CACATTGTGT CAGGTTGAGG GGACAGGAGA ACTTTCAAAA GCCTTTCTTG
ACCATGTGG TCATAAGAC	TCTATAAAA TACAGCTCA	TTGCTCTCTG ATGTAACCCT TTCACAATGT TTGGGCAGCT	TGAGTGCCA GCCTCATTT	AGGGCAGGAG GAGACGAGAG CTAATTGTAA CTTTGTGATT AGCTGTCATG	AGCCAGAAG GCCAAGCGI		CCCTAGCTG GTCTTTAAT	ATATTTTGC CCTCAATATA	TATATATGT TATATAATC	AGGTTGAGG GGACAGGAG
CTTGACGCCC I	AAAAACAAAA TGTGTTTGT T	ATGTAACCCT I	CCAGGCCAAA G	GAGACGAGAG C	GCGCTCAATA A	TTCTCAGTGC AGAAGGGCTT	GTGGTTAAAA T		AATCATAGAG A	CACATTGTGT C
ACACCCACTC	AAAAACAAAA	TTGCTCTCTG	AGGGTCCCAT	AGGGCAGGAG	CCTGTCAATA	TGAGTCAGAT	TGGTTCTTAA	ATGGCTGACA TTCTGCTGTG	TAGATCCCTG	GTGATAAGTA

FIGURE 16 (118)

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						. •.
	CCCCTTTTTC	CTTCTCACTG	CCTCCCACTA AGTCCAGCCA CTTATTATTC AGCTGACACT	AGTCCAGCCA	CTTATTATTC	AGCTGACACT
	ATCATCATGA	CCATGAGGTC	ATCATCATGA CCATGAGGTC TTTTGGGGCT ACCCTGGTTC GGATCCTTCT GGAGGTTTG	ACCCTGGTTC	GGATCCTTCT	GGAGGTTTG1
	TGCTTAACTC	TGTCTTCAGT	CCTATGAGCT	CCTATGAGCT GCTTTTTCAA TAAGTTTCTA	TAAGTTTCTA	TTTTGGCTA
STIE	AGTTGGCCAG	AATCTCCTTG	AGTTGGCCAG AATCTCCTTG TAACCAAAGA ACAAATAAAA TACCAGCTTG CAATGTTCT?	ACAAATAAAA	TACCAGCTTG	CAATGTTCT?
ירו דוודצו	TGTTGCTTCC	TGTTGCTTCC ACCAAACTTA TGCAGCACTT		CCTATCTAAT CCACCTACTA GTCTTTTTT	CCACCTACTA	GTCTTTTTT
F SHEET	TTTTTATTT		TTTTGAGACG GAGTCTCGCT CTGTTGCTCA GGATGGAGTG CAATGGTGCA	CTGTTGCTCA	GGATGGAGTG	CAATGGTGC
Rule 26	ATCTCGGCTC	ATCTCGGCTC ACTGCAACCT	CTGCCTCCCG	CTGCCTCCCG GGTTCAAGCA ATTCCCCGGC CTCAGCCTCC	ATTCCCGGC	CTCAGCCTCC
1	TGAGTAGCTG	GGACTACAGG	TGAGTAGCTG GGACTACAGG TGCATGCCAC CACGTCCGGC TAATTTTTGT ATTTTAGGAC	CACGTCCGGC	TAATTTTGT	ATTTTAGGAC
	AGAGAGGGTT	TCACCATGTT	GCCCAGGCTG	GTCACGAACT	CCTGAGCTCA GGCAATCCGC	GGCAATCCGC
	CCTCCTCGGG CTC	CTCCCAAAGT	CCAAAGT GCTGGGATTA CAGGAGTGAG CCACCTCACC TGGCCCCGAC	CAGGAGTGAG	CCACCTCACC	TGGCCCCGAC
	CTACTAGTCT	TTAGTGTTTG	GTGTTTG CTTCCTTCTA TTGGGTAATT GTCTGTTTAT ATGCATGTC1	TTGGGTAATT	GTCTGTTTAT	ATGCATGTCT

FIGURE 16 (119)

GAAGGGGCTT	GGGCAGGATG	CTCACAGAGA	ATGTAACCTT	AAAGGAAAAT ATATTGGCTC ATGTAACCTT CTCACAGAGA GGGCAGGATG GAAGGGGCTT	AAAGGAAAAT
ACGTAAGTCA	ATTCAAACCA	CAGAAACTCA	TTGCAAGTGA	TATTGITCAG AACCCTTGGA TTGCAAGTGA CAGAAACTCA ATTCAAACCA ACGTAAGTCA	TATTGTTCAG
TTAACGTGCA	GAAAAATATA	AAAAGAGAGT	GAGAAAAAGA	AAGCACATCT TTATTTGTAT GAGAAAAAGA AAAAGAGAGT GAAAAATATA	AAGCACATCT
TGTTTAGGAT	TTCTGGTGTT	ATGTAATTAT AAGAATGAGA ATACTGAGTA TTCTGGTGTT	AAGAATGAGA		AAATCATTTT
GATAAATAGA	AAAAGGGCTA	GCCCCATAGT	TGAGGACTAA	TACCTATGCT AGTCTCTTCA TGAGGACTAA GCCCCATAGT AAAAGGGCTA GATAAATAGA	TACCTATGCT
CTACACTGTG	TTGATCATCT CCTCCCCAAC CTACACTGTG	TTGATCATCT	GGGTTATTGC	GCTTGG	TCTGATGCTC CGTG
ACCTCAGCCT	CAGAGA AACATGTTTA AATGCTGTCC TGTTATCAGG ACCTCAGCCT	AATGCTGTCC	AACATGTTTA	GACCCAGAGA	ACTAAAAGAG GACC
CCCCATAGTA	ATGTTTCTAT CCCCATAGTA	ACTTGCAGCT	GAAAGC AGGTAGCTTT	CGGAGAAAGC	ATTGGAGTAC CGGA
AAACATCTCC	TITCCT ICTITATCCC CAGCATITCT CAATAATTTC AAACATCTCC	CAGCATTTCT	TCTTTATCCC	ATTTTTCCT	TCATTGCTCC ATTT
CATTATTGAT	CTAGCA GTGTCTTTCA CAGAGGAAGT ACACAACTGG CATTATTGAT	CAGAGGAAGT	GTGTCTTTCA	GCACCTAGCA	AGATATCACA GCAC
ATCCATCTGT	CCCATGTTCT	AGGGTATTGG	GGTCTTCTCA	TGTTTCCTCA AATAAAATGT GGTCTTCTCA AGGGTATTGG CCCATGTTCT ATCCATCTGT	TGTTTCCTCA

FIGURE 16 (120)

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CTACAGCCAC CCTTAGTTTA GCAATTGATT	GGGACA ATGTCTTCAG ATTATCCTAG ACCAAATAAA CTACAGCCAC CCTCCT CCAACTGGAC CATGTTCCCA GGGCTCTTCA CCTTAGTTTA GGCAAA AGAAAGGCCT AGTTAACAAT AGACATTCTA GCAATTGATT	ATTATCCTAG CATGTTCCCA AGTTAACAAT	ATGTCTTCAG CCAACTGGAC AGAAAGGCCT	TGGGTTTTTT CCTGGGGACA ATGTCTTCAG ATTATCCTAG ACCAAATAAA CTACAGCCAC TGGGCCAGGC TCTTCCTCCT CCAACTGGAC CATGTTCCCA GGGCTCTTCA CCTTAGTTTA GGTCAAGCAT TCTTGGCAAA AGAAAGGCCT AGTTAACAAT AGACATTCTA GCAATTGATT	TGGGTTTTTT CCTG TGGGCCAGGC TCTT
AGCTTTGCTT	CTGTTTGTAT GGACTGCCTT AGCTTTGCTT	CTGTTTGTAT	GGACTGGTGG	CCTCTG	TTCTCTTTTC CTCA
CTAGTGATCT	TTGCCTCACT CTAGTGATCT	CCCATTTCTG	CCTTAT ATGGCTCTCT CCCATTTCTG	GGTTCCTTAT	TACTAAGCTG GGTT
GCAGGGTTTC	TATGCCCTGT AAAAGCTTCT	TATGCCCTGT	CCTGAGGCCA	CTTGTA	CAGCTTACTC ACTG
TTGCTTTTCA	TTTTATCTTA AGCCTTGTAC TTGCTTTTCA	ТТТТАТСТТА	CTCTAC TGGTGGGTGC		AAAGAACATA GGGA
CACACAGGAA	TTAATTTCAC AAATGCTTCC AACAAAGTAG CACACAGGAA	AAATGCTTCC	TTAATTTCAC	GATGTCTTCC	GGTTTTTTT GATG
TGCTAAAAAT	AGGGCT AAGCAAACAA GGGCAAGGGC CACTATATCA TGCTAAAAAT	GGGCAAGGGC	AAGCAAACAA	AGGTAGGGCT	GTTAGGATGA AGGT
TATGGGAGGA AAGAGTGCAT		TGGTAGCGAT GGTAGAGTCT	TGGTAGCGAT	CCTGAGGTGG	CCTTCCTGTC
GGATGGGTCA	TTGTTC TCAAATTCTA GGAATACTAG GATTAGTCCA GGATGGGTCA	GGAATACTAG	TCAAATTCTA	AGAATTGTTC	TGGGAACAAG AGAA

FIGURE 16 (121)

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CTTTTTGACA TGTTGTAAGA TCTATTCACA TTTTGTAATT AAAGCATTCC CCTATGGAAA	CCTGGAATGC AGGGTGGCCT CCTCAATACA GGATGTTCTA	GAGAGCTGTA TTTTGGGCAC TTAACTATTC TCCACTACTT AGGGCACAGC ACTGAAATTA	TAGTCTCAGG CAGTGCAGCC TCAGGAGTGG	AACTGACCTC TTATGTGTGT CCAGCCTTTC TTCCTTCAGA AGTCAGCTGT GTTTTCTGCT	CTCAGACCAC CATCTGGAGT AGTAAGTGCT	CCTGACAGTC CTAGAAGTTG TCTACCGCTG GATCTCCAAA GCGTGTGACA CACCGTGAGA	TTTCACAAGC CCCCTAATTT	TACTGCATAA TTATTTTGAA TTCACTGATA ATTTCTACAA TTTTCCCATA AGTCATCTAC	TTGCTAATAC ATATCTATTA TGAGAGCTGT	GCTTCTTAAG CGTAAATGTT TTATATGCAC TAAGGCTCTT GGCTTACATA TAAAAGGGGT
AAAGCATTC	CCTCAATAC	AGGGCACAG	CAGTGCAGC	AGTCAGCTG	CATCTGGAG	GCGTGTGAC		TTTCCCAT	ATATCTATT	GGCTTACAT
TTTTGTAATT	AGGGTGGCCT	TCCACTACTT	TAGTCTCAGG	TTCCTTCAGA	CTCAGACCAC	GATCTCCAAA	AATCTTGCTT	ATTTCTACAA	TTGCTAATAC	TAAGGCTCTT
TCTATTCACA	CCTGGAATGC	TTAACTATTC	TCCATGTAGT	CCAGCCTTTC	GTCCTGAATC	TCTACCGCTG	TCTTCAGGTA AATCTTGCTT	ТТСАСТGАТА	ACACTTGGCT	TTATATGCAC
тсттстааса	CTAAGCTGCT	TTTTGGGCAC	GTTTGTCATG	ттатстстст	GACTCTCCAT AGGAACATCA	CTAGAAGTTG		TTATTTGAA	ACACAATACC CTCTCATGCA ACACTTGGCT	CGTAAATGTT
CTTTTTGACA	CCAACACGAA CTAAGCTGCT	GAGAGCTGTA	ACACCACTAA GTTTGTCATG	AACTGACCTC	GACTCTCCAT	CCTGACAGTC	GAGAAATGAG AAAGCTGGGC	TACTGCATAA	ACACAATACC	GCTTCTTAAG

	GAATTCATTA
	Ą
	ACAGGTCT
	AGTCTTTTCT CC
(7)	GTGATACAGA
FIGURE 10 (12	ATTGAGCAAT

GGAAGTCATT	TTGCTCAATA	GGTCATTGAG	AAGTGGACAG	АААСТСТТАТ	GGATTTTG
GATTGGCTGA AATAGACTGA TCTGTCCATT TCTCTGCTCA CTTATCATAA GGAAGTCATT	AGCTAAGGAA CAAAAACTAC AATCTATGTA ATTAGAAGAA CAAGCTGGTT TTGCTCAATA	TAAAAATAAG AAAAAGAAAC CATGTGAAAG TCAAAATATT TGTTTAATCA GGTCATTGAG	AATCTATTAA AAAGTATTTG AATTCTTTAT GATGAGAACT ATCTTGACTC AAGTGGACAG	TGGTGAGCTT TTTGGCCTGT GGTCCCTACG TAGAAAGGAG GCTTTGTCAT AAAGTCTTAT	ATGGTACAGG TGCCAAGTTA AGTGCCCAAG CTTGCTCTTA AAAGCATACT GGATTTTG
TCTCTGCTCA	ATTAGAAGAA	TCAAAATATT	GATGAGAACT	TAGAAAGGAG	CTTGCTCTTA
тствтссатт	AATCTATGTA	CATGTGAAAG	AATTCTTTAT	GGTCCCTACG	AGTGCCCAAG
AATAGACTGA	CAAAAACTAC	AAAAAGAAAC	AAAGTATTTG	TTTGGCCTGT	TGCCAAGTTA
GATTGGCTGA	AGCTAAGGAA	TAAAAATAAG	AATCTATTAA	TGGTGAGCTT	ATGGTACAGG
		SUB	STITUTI	E SHEET	(Rule

INTERNATIONAL SEARCH REPORT

International Application No.
PCT/AU 98/00352

A.	CLASSIFICATION OF SUBJECT MATTER					
Int Cl ⁶ .	C12N 15/11, 15/79 A61K 48/00					
According to	International Patent Classification (IPC) or to both	national classification and IPC				
В.	FIELDS SEARCHED	·				
	mentation searched (classification system followed by clobelow) STN (CA - see below)	assification symbols)				
Documentation MEDLINE (searched other than minimum documentation to the extension see below)	ent that such documents are included in t	he fields searched			
WPAT - (ART	base consulted during the international search (name of IFICIAL CHROMOSOME# OR MINICHROMOSOME# DMOSOME# OR YAC# OR MAC# OR HAC# OR CEN	OR MINI CHROMOSOME# OR MICR	O CHROMOSOME# OR			
STN (CA and MEDLINE): CENTROMERE AND (ALPHA SATELLITE OR ALPHASATELLITE)						
C. DOCUMENTS CONSIDERED TO BE RELEVANT						
Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim						
PX Human Molecular Genetics 6(8), pages 1195-1204 (1997) Depinet, T.T. et al "Characterization of neocentromeres in marker chromosomes lacking detectable alpha-satellite DNA." See whole document. 1-4, 11-17, 24-30, 37 39, 61-64, 71-74						
PX Genetic Counseling 8(4), pages 341-343 (1997) Petit, P. and Fryns, J.P. "Interstitial deletion 2P accompanied by marker chromosome formation of the deleted segment resulting in a stable acentric marker chromosome." See whole document.						
Further documents are listed in the continuation of Box C See patent family annex						
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family						
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PCT/AU 98/00352

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X	Cancer Genetics & Cytogenetics 39(1) pages 1-6 (1996) Abeliovich, D. et al "dup (109) lacking α-satellite DNA in bone marrow cells of patient with acute myeloid leukemia." See whole document.	1-6, 8-19, 21-32, 34-39, 61-66, 68-74
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A	WO A 97 16533 (THE REGENTS OF THE UNIVERSITY OF CLAIFORNIA) 9 May 1997. See whole document.	1-74

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Information on patent family members

International Application No. PCT/AU 98/00352

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Do	cument Cited in Search Report		- 1000 H	Patent Family Member	
wo	9716533	ŲS	9716533		
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